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<211> 694

<212> PRT

<213> Homo sapiens

<400> 5328

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Gly	Asp	Val	Tyr	Tyr	Arg	Glu	Ala	Thr	Asp	Pro	Ala	Met	Leu	Arg	Arg

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Gly Ser Ser Ser Ser Pro Val Asn Thr Phe Gln Thr Val Leu Ile Thr		95
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Asp Gly Lys Leu Ser Phe Thr Ile Phe Asn Tyr Glu Ser Ile Val Trp		110
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Thr Thr Gly Thr His Ala Ser Ser Gly Gly Asn Ala Thr Gly Leu Gly		125
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Gly Ile Ala Ala Gln Ala Gly Phe Asn Ala Gly Asp Gly Gln Arg Tyr		140
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Phe Ser Ile Pro Gly Ser Arg Thr Ala Asp Met Ala Glu Val Glu Thr		160
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Ala Leu Arg Pro Cys Leu Asn Gly Gly Lys Cys Ile Asp Asp Cys Val		205
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225	230	235
Arg Arg Cys His Leu Asp Val Asn Glu Cys Ala Ser Gln Pro Cys Gln		240
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Lys Gly Leu Arg Cys Glu Thr Gly Asp His Pro Val Pro His Ala Cys		350
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Gly Tyr Val Cys Glu Cys Pro Glu Gly Phe Met Gly Leu Asp Cys Arg		385
385	390	395
Glu Arg Val Xaa Pro Met Thr Val Ser Ala Ala Thr Glu Ala Asp Ala		400
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Trp Ala Pro Thr Pro Pro Ser Ala His Ala Pro Cys Gly Xaa Ser Leu		415
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Gly Phe Ser Val Asn Leu Lys Ser Gln Pro Xaa Pro Cys Asn Met Asn		430
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Thr Gln Cys Pro Asp Gly Gly Tyr Cys Met Glu His Gly Gly Ser Tyr		445
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Leu Cys Val Cys His Thr Asp His Asn Ala Ser His Ser Leu Pro Ser		465
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<212> DNA
<213> Homo sapiens
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<211> 308

<212> PRT

<213> Homo sapiens

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Arg	Arg	Cys	Lys	Met	His	Lys	Arg	Arg	Ile	Ala	Met	Leu	Glu	Pro	Leu
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 <212> PRT

<213> Homo sapiens

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Ser Gln Pro Gln Gly Leu Ser Tyr Ala Xaa Gly Arg Gly
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<212> DNA

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<211> 766

<212> PRT

<213> Homo sapiens

<400> 5336

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<210> 5337

<211> 2742

<212> DNA

<213> Homo sapiens

<400> 5337

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<212> PRT

<213> Homo sapiens

<400> 5338

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			20					25					30		
Asn	Ser	Gln	Met	Lys	Ile	Val	His	Lys	Lys	Lys	Glu	Arg	Gly	His	Gly
			35				40					45			
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Pro	Arg	Leu	Leu	Phe	Lys	Ser	Gln	Ala	Asn	Gln	Asn	Tyr	Ala	Gly	Ala
			85					90						95	
Lys	Phe	Ser	Glu	Pro	Pro	Ser	Pro	Ser	Val	Leu	Pro	Lys	Pro	Pro	Ser
			100					105					110		
His	Trp	Val	Pro	Val	Ser	Phe	Asn	Pro	Ser	Asp	Lys	Glu	Ile	Met	Thr
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<210> 5339

<211> 847

<212> DNA

<213> Homo sapiens

<400> 5339

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<211> 217

<212> PRT

<213> Homo sapiens

<400> 5340

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Leu	Leu	Ser	Gly	Asp	Glu	Tyr	Asn	Gln	Asp	Phe	Asp	Ser	Thr	Asn	Phe
		35					40					45			
Glu	Glu	Ser	Gln	Asp	Glu	Asp	Asp	Ala	Leu	Asn	Glu	Ile	Val	Arg	Cys
	50					55					60				
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Cys	Leu	Cys	Trp	Gln	His	Ser	Val	Cys	Met	Gly	Leu	Leu	Glu	Glu	Ser
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Ile	Pro	Glu	Gln	Tyr	Ile	Cys	Tyr	Ile	Cys	Arg	Asp	Pro	Pro	Gly	Gln
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Arg	Trp	Ser	Ala	Lys	Tyr	Arg	Tyr	Asp	Lys	Glu	Trp	Leu	Asn	Asn	Gly
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Arg	Met	Cys	Gly	Leu	Ser	Phe	Phe	Lys	Glu	Asn	Tyr	Ser	His	Leu	Asn
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Val	Thr	Glu	Val	Leu	His	Gly	Leu	Gln	Leu	Lys	Ile	Gly	Ile	Leu	Lys
			165					170					175		
Asn	Lys	His	His	Pro	Asp	Leu	His	Leu	Trp	Ala	Cys	Ser	Gly	Lys	Arg
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<210> 5341

<211> 2455

<212> DNA

<213> Homo sapiens

<400> 5341

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<210> 5342

<211> 690

<212> PRT

<213> Homo sapiens

<400> 5342

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 Ser Leu Ala Ala Ala Ala Leu Ala Leu Thr Leu Leu Pro Ala Arg Leu
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 Pro Pro Gly Leu Arg Trp Leu Pro Ala Asp Val Ile Phe Leu Ala Lys
 85 90 95
 Ile Leu His Leu Gly Leu Lys Ile Arg Gly Cys Leu Ser Arg Gln Pro

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Asn Val Ser Thr His Glu Val	Gly Val Leu Ser Gln Val Asp Phe			
565	570	575		
Leu Gln Gln Val Asn Val Tyr	Gly Val Cys Val Pro Gly Cys Glu Gly			
580	585	590		
Lys Val Gly Met Ala Ala Val	Gln Leu Ala Pro Gly Gln Thr Phe Asp			
595	600	605		
Gly Glu Lys Leu Tyr Gln His	Val Arg Ala Trp Leu Pro Ala Tyr Ala			
610	615	620		
Thr Pro His Phe Ile Arg Ile	Gln Asp Ala Met Glu Val Thr Ser Thr			
625	630	635	640	
Phe Lys Leu Met Lys Thr Arg	Leu Val Arg Glu Gly Phe Asn Val Gly			
645	650	655		
Ile Val Val Asp Pro Leu Phe	Val Leu Asp Asn Arg Ala Gln Ser Phe			
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Arg Pro Leu Thr Ala Glu Met	Tyr Gln Ala Val Cys Glu Gly Thr Trp			
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Lys Leu				
690				

<210> 5343

<211> 752

<212> DNA

<213> Homo sapiens

<400> 5343

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 180
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 420
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 600
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 660
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<210> 5344

<211> 124

<212> PRT

<213> Homo sapiens

<400> 5344

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      20           25           30
Glu Arg Ser Phe Phe Leu Lys Lys Arg Arg Ala Asp Phe Val Ala Gly
      35           40           45
Ser Leu Ser Gly Arg Val Ile Val Ala Gly Gly Leu Gly Asn Gln Pro
      50           55           60
Thr Val Leu Glu Thr Ala Glu Ala Phe His Pro Gly Lys Asn Lys Trp
      65           70           75           80
Glu Ile Leu Pro Ala Met Pro Thr Pro Arg Cys Ala Cys Ser Ser Ile
      85           90           95
Val Val Lys Asn Cys Leu Leu Ala Val Gly Gly Val Asn Gln Gly Leu
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Ser Asp Ala Val Glu Ala Leu Cys Val Ser Asp Ser
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<210> 5345

<211> 1912

<212> DNA

<213> Homo sapiens

<400> 5345

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540
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600
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660
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720

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tcacagctag atcttcgggt acaggagtta ataaagttga tctgtaatgt tcaggccatg
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 840
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 900
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 960
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 1020
 caattactag aggctttggg agacattgaa attgctatta agctgggtgaa aacagagcta
 1080
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 1140
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 1200
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 1260
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 1320
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 1560
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 1620
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 1800
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 1912

<210> 5346

<211> 534

<212> PRT

<213> Homo sapiens

<400> 5346

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Gln	Asp	Gly	Met	Pro	Gly	Arg	Ser	Trp	Ala	Ser	Lys	Arg	Val	Ser	Glu
			20					25					30		
Ser	Val	Lys	Ala	Leu	Leu	Leu	Lys	Gly	Lys	Ala	Pro	Val	Asp	Pro	Glu
			35				40					45			
Cys	Thr	Ala	Lys	Val	Gly	Lys	Ala	His	Val	Tyr	Cys	Glu	Gly	Asn	Asp

50	55	60
Val Tyr Asp Val Met Leu Asn Gln Thr Asn Leu Gln Phe Asn Asn Asn		
65	70	75
Lys Tyr Tyr Leu Ile Gln Leu Leu Glu Asp Asp Ala Gln Arg Asn Phe		80
	85	90
Ser Val Trp Met Arg Trp Gly Arg Val Gly Lys Met Gly Gln His Ser		95
	100	105
Leu Val Ala Cys Ser Gly Asn Leu Asn Lys Ala Lys Glu Ile Phe Gln		110
	115	120
Lys Lys Phe Leu Asp Lys Thr Lys Asn Asn Trp Glu Asp Arg Glu Lys		125
	130	135
Phe Glu Lys Val Pro Gly Lys Tyr Asp Met Leu Gln Met Asp Tyr Ala		140
145	150	155
Thr Asn Thr Gln Asp Glu Glu Glu Thr Lys Lys Glu Glu Ser Leu Lys		160
	165	170
Ser Pro Leu Lys Pro Glu Ser Gln Leu Asp Leu Arg Val Gln Glu Leu		175
	180	185
Ile Lys Leu Ile Cys Asn Val Gln Ala Met Glu Glu Met Met Met Glu		190
	195	200
Met Lys Tyr Asn Thr Lys Lys Ala Pro Leu Gly Lys Leu Thr Val Ala		205
	210	215
Gln Ile Lys Ala Gly Tyr Gln Ser Leu Lys Lys Ile Glu Asp Cys Ile		220
225	230	235
Arg Ala Gly Gln His Gly Arg Ala Leu Met Glu Ala Cys Asn Glu Phe		240
	245	250
Tyr Thr Arg Ile Pro His Asp Phe Gly Leu Arg Thr Pro Pro Leu Ile		255
	260	265
Arg Thr Gln Lys Glu Leu Ser Glu Lys Ile Gln Leu Leu Glu Ala Leu		270
	275	280
Gly Asp Ile Glu Ile Ala Ile Lys Leu Val Lys Thr Glu Leu Gln Ser		285
	290	295
Pro Glu His Pro Leu Asp Gln His Tyr Arg Asn Leu His Cys Ala Leu		300
305	310	315
Arg Pro Leu Asp His Glu Ser Tyr Glu Phe Lys Val Ile Ser Gln Tyr		320
	325	330
Leu Gln Ser Thr His Ala Pro Thr His Ser Asp Tyr Thr Met Thr Leu		335
	340	345
Leu Asp Leu Phe Glu Val Glu Lys Asp Gly Glu Lys Glu Ala Phe Arg		350
	355	360
Glu Asp Leu His Asn Arg Met Leu Leu Trp His Gly Ser Arg Met Ser		365
	370	375
Asn Trp Val Gly Ile Leu Ser His Gly Leu Arg Ile Ala Pro Pro Glu		380
385	390	395
Ala Pro Ile Thr Gly Tyr Met Phe Gly Lys Gly Ile Tyr Phe Ala Asp		400
	405	410
Met Ser Ser Lys Ser Ala Asn Tyr Cys Phe Ala Ser Arg Leu Lys Asn		415
	420	425
Thr Gly Leu Leu Leu Leu Ser Glu Val Ala Leu Gly Gln Cys Asn Glu		430
	435	440
Leu Leu Glu Ala Asn Pro Lys Ala Glu Gly Leu Leu Gln Gly Lys His		445
	450	455
Ser Thr Lys Gly Leu Gly Lys Met Ala Pro Ser Ser Ala His Phe Val		460
465	470	475
Thr Leu Asn Gly Ser Thr Val Pro Leu Gly Pro Ala Ser Asp Thr Gly		480

	485		490		495
Ile Leu Asn Pro Asp Gly Tyr Thr	Leu Asn Tyr Asn Glu Tyr Ile Val				
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Tyr Asn Pro Asn Gln Val Arg Met Arg Tyr Leu Leu Lys Val Gln Phe					
515	520	525			
Asn Phe Leu Gln Leu Trp					
530					

<210> 5347<211> 2893

<212> DNA

<213> Homo sapiens

<400> 5347

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 1080
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 1200

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<210> 5348

<211> 694

<212> PRT

<213> Homo sapiens

<400> 5348

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Tyr Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Glu Leu Leu Phe
35 40 45
Leu Gly Gly Pro Ala Ser Ser Ala Tyr Ala Leu Ser Pro Phe Ser Ala
50 55 60
Ser Gly Gly Trp Gly Arg Ala Gly His Leu His Pro Lys Gly Arg Glu
65 70 75 80
Leu Asp Pro Ala Ala Pro Pro Glu Gly Gln Leu Leu Arg Glu Val Arg
85 90 95
Ala Leu Gly Val Pro Phe Val Pro Arg Thr Ser Val Asp Ala Trp Leu
100 105 110
Val His Ser Val Ala Ala Gly Ser Ala Asp Glu Ala His Gly Leu Leu
115 120 125
Gly Ala Ala Ala Ala Ser Ser Thr Gly Gly Ala Gly Ala Ser Val Asp
130 135 140
Gly Gly Ser Gln Ala Val Gln Gly Gly Cys Gly Asp Ser Arg Ala Ala
145 150 155 160
Arg Ser Gly Pro Leu Asp Ala Gly Glu Glu Lys Ala Pro Ala Glu
165 170 175
Pro Thr Ala Gln Val Pro Asp Ala Gly Gly Cys Ala Ser Glu Glu Asn
180 185 190
Gly Val Leu Arg Glu Lys His Glu Ala Val Asp His Ser Ser Gln His
195 200 205
Glu Glu Asn Glu Glu Arg Val Ser Ala Gln Lys Glu Asn Ser Leu Gln
210 215 220
Gln Asn Asp Asp Asp Glu Asn Lys Ile Ala Glu Lys Pro Asp Trp Glu
225 230 235 240
Ala Glu Lys Thr Thr Glu Ser Arg Asn Glu Arg His Leu Asn Gly Thr
245 250 255
Asp Thr Ser Phe Ser Leu Glu Asp Leu Phe Gln Leu Leu Ser Ser Gln
260 265 270
Pro Glu Asn Ser Leu Glu Gly Ile Ser Leu Gly Asp Ile Pro Leu Pro
275 280 285
Gly Ser Ile Ser Asp Gly Met Asn Ser Ser Ala His Tyr His Val Asn
290 295 300
Phe Ser Gln Ala Ile Ser Gln Asp Val Asn Leu His Glu Ala Ile Leu
305 310 315 320
Leu Cys Pro Asn Asn Thr Phe Arg Arg Asp Pro Thr Ala Arg Thr Ser
325 330 335
Gln Ser Gln Glu Pro Phe Leu Gln Leu Asn Ser His Thr Thr Asn Pro

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Glu Gln Thr Leu Pro Gly Thr Asn Leu Thr Gly Phe Leu Ser Pro Val
      355      360      365
Asp Asn His Met Arg Asn Leu Thr Ser Gln Asp Leu Leu Tyr Asp Leu
      370      375      380
Asp Ile Asn Ile Phe Asp Glu Ile Asn Leu Met Ser Leu Ala Thr Glu
385      390      395      400
Asp Asn Phe Asp Pro Ile Asp Val Ser Gln Leu Phe Asp Glu Ser Asp
      405      410      415
Ser Asp Ser Gly Leu Ser Leu Asp Ser Ser His Asn Asn Thr Ser Val
      420      425      430
Ile Lys Ser Asn Ser Ser His Ser Val Cys Asp Glu Gly Ala Ile Gly
      435      440      445
Tyr Cys Thr Asp His Glu Ser Ser His His Asp Leu Glu Gly Ala
      450      455      460
Val Gly Gly Tyr Tyr Pro Glu Pro Ser Lys Leu Cys His Leu Asp Gln
465      470      475      480
Ser Asp Ser Asp Phe His Gly Asp Leu Thr Phe Gln His Val Phe His
      485      490      495
Asn His Thr Tyr His Leu Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu
      500      505      510
Pro Phe Pro Trp Pro Gly Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu
      515      520      525
Glu Asp Thr Asp Arg Asn Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala
      530      535      540
Leu His Ile Pro Phe Ser Val Asp Glu Ile Val Gly Met Pro Val Asp
545      550      555      560
Ser Phe Asn Ser Met Leu Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val
      565      570      575
Asp Ile Arg Arg Arg Gly Lys Asn Lys Val Ala Ala
      580      585      590
Gln Asn Cys Arg Lys Arg Lys Leu Asp Ile Ile Leu Asn Leu Glu Asp
      595      600      605
Asp Val Cys Asn Leu Gln Ala Lys Lys Glu Thr Leu Lys Arg Glu Gln
      610      615      620
Ala Gln Cys Asn Lys Ala Ile Asn Ile Met Lys Gln Lys Leu His Asp
625      630      635      640
Leu Tyr His Asp Ile Phe Ser Arg Leu Arg Asp Asp Gln Gly Arg Pro
      645      650      655
Val Asn Pro Asn His Tyr Ala Leu Gln Cys Thr His Asp Gly Ser Ile
      660      665      670
Leu Ile Val Pro Lys Glu Leu Val Ala Ser Gly His Lys Lys Glu Thr
      675      680      685
Gln Lys Gly Lys Arg Lys
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<210> 5349

<211> 425

<212> DNA

<213> Homo sapiens

<400> 5349

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120
tgggcaaaaca ccacaccagc agggagcccc aagcccagcc caagccccac aaagtctcca
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240
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300
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425

<210> 5350

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5350

Met	Gly	Gly	Leu	Gly	Leu	His	Phe	Phe	Val	Pro	Thr	His	Ser	Ser	Gln
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Val	Thr	Ala	Cys	His	Ser	Ser	Pro	Leu	Pro	Cys	Gly	Cys	Gln	Asp	Asn
		20					25						30		
Leu	Gly	Lys	His	His	Thr	Ser	Arg	Glu	Pro	Gln	Ala	Gln	Pro	Lys	Pro
		35					40					45			
His	Lys	Val	Ser	Ser	Gln	Glu	Gly	Glu	Gly	Arg	Ile	Pro	Leu	Pro	Gly
	50					55				60					
Lys	Ala	Glu	Val	Arg	Glu	Ala	Gly	Gln	Pro	Ile	Pro	Val	Ser	Leu	Leu
65					70				75					80	
Leu	Leu	Ser	Pro	Lys	Lys	Ala	Leu	Thr	Leu	Leu	Ala	Thr	Ala	Gln	Gly
			85						90					95	
Gly	His	Glu	Gly	Leu	Gly	Arg	Leu	Leu	Trp	Gln	Ser	Gly	Pro	Leu	Gln
		100					105						110		
Pro	Arg	Pro	Glu	Lys	Lys	Arg	Thr	Pro	Lys	Ser	Phe	Trp	Leu	Pro	Val
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Ser	Ser	Ala	Phe	Thr	Arg										
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<210> 5351

<211> 343

<212> DNA

<213> Homo sapiens

<400> 5351

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120
gtgtaacagg ctgggtttcg agacggaccg agaaggcaag ttctgctgca ggcttttggg
180
cagagcgtct tgggtccaat caaaatcact cttgttgctg ccgtttcggg tgtcacagtt
240

cctcctctca ctattggaca gcttgaagcc aaggcccagg cctgaccagt aggaatccga
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 343

<210> 5352
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 5352
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 Asn Cys Asp Thr Arg Asn Gly Ser Asn Lys Ser Asp Phe Asp Trp His
 35 40 45
 Gln Asp Ala Leu Ser Lys Ser Leu Gln Gln Asn Leu Pro Ser Arg Ser
 50 55 60
 Val Ser Lys Pro Ser Leu Phe Ser Ser Val Gln Leu Tyr Arg Gln Ser
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 85 90 95
 Arg Gln Cys Ser Ala Ala Tyr Asp Thr Leu Val Glu Leu Thr Val His
 100 105 110

<210> 5353
 <211> 4217<212> DNA
 <213> Homo sapiens

<400> 5353
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 180
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 360
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<212> PRT

<213> Homo sapiens

<400> 5354

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<212> DNA

<213> Homo sapiens

<400> 5355

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<213> Homo sapiens

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<213> Homo sapiens

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<210> 5360

<211> 1406

<212> PRT

<213> Homo sapiens

<400> 5360

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 Val Ser Gln Leu Arg Glu Val Tyr Ser Ser Cys Asp Thr Thr Gly Thr
 35 40 45
 Gly Phe Leu Asp Arg Gln Glu Leu Thr Gln Leu Cys Leu Lys Leu His
 50 55 60
 Leu Glu Gln Gln Leu Pro Val Leu Leu Gln Thr Leu Leu Gly Asn Asp
 65 70 75 80
 His Phe Ala Arg Val Asn Phe Glu Glu Phe Lys Glu Gly Phe Val Ala
 85 90 95
 Val Leu Ser Ser Asn Ala Gly Val Arg Pro Ser Asp Glu Asp Ser Ser
 100 105 110
 Ser Leu Glu Ser Ala Ala Ser Ser Ala Ile Pro Pro Lys Tyr Val Asn
 115 120 125
 Gly Ser Lys Trp Tyr Gly Arg Arg Ser Arg Pro Glu Leu Cys Asp Ala
 130 135 140
 Ala Thr Glu Ala Arg Arg Val Pro Glu Gln Gln Thr Gln Ala Ser Leu
 145 150 155 160
 Lys Ser His Leu Trp Arg Ser Ala Ser Leu Glu Ser Val Glu Ser Pro
 165 170 175
 Lys Ser Asp Glu Glu Ala Glu Ser Thr Lys Glu Ala Gln Asn Glu Leu
 180 185 190
 Phe Glu Ala Gln Gly Gln Leu Gln Thr Trp Asp Ser Glu Asp Phe Gly
 195 200 205
 Ser Pro Gln Lys Ser Cys Ser Pro Ser Phe Asp Thr Pro Glu Ser Gln
 210 215 220
 Ile Arg Gly Val Trp Glu Glu Leu Gly Val Gly Ser Ser Gly His Leu
 225 230 235 240
 Ser Glu Gln Glu Leu Ala Val Val Cys Gln Ser Val Gly Leu Gln Gly
 245 250 255
 Leu Glu Lys Glu Glu Leu Glu Asp Leu Phe Asn Lys Leu Asp Gln Asp
 260 265 270
 Gly Asp Gly Lys Val Ser Leu Glu Glu Phe Gln Leu Gly Leu Phe Ser
 275 280 285
 His Glu Pro Ala Leu Leu Leu Glu Ser Ser Thr Arg Val Lys Pro Ser
 290 295 300
 Lys Ala Trp Ser His Tyr Gln Val Pro Glu Glu Ser Gly Cys His Thr
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 Thr Thr Thr Ser Ser Leu Val Ser Leu Cys Ser Ser Leu Arg Leu Phe
 325 330 335
 Ser Ser Ile Asp Asp Gly Ser Gly Phe Ala Phe Pro Asp Gln Val Leu
 340 345 350
 Ala Met Trp Thr Gln Glu Gly Ile Gln Asn Gly Arg Glu Ile Leu Gln
 355 360 365
 Ser Leu Asp Phe Ser Val Asp Glu Lys Val Asn Leu Leu Glu Leu Thr
 370 375 380
 Trp Ala Leu Asp Asn Glu Leu Met Thr Val Asp Ser Ala Val Gln Gln

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385          390          395          400
Ala Ala Leu Ala Cys Tyr His Gln Glu Leu Ser Tyr Gln Gln Gly Gln
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Val Glu Gln Leu Ala Arg Glu Arg Asp Lys Ala Arg Gln Asp Leu Glu
          420          425          430
Arg Ala Glu Lys Arg Asn Leu Glu Phe Val Lys Glu Met Asp Asp Cys
          435          440          445
His Ser Thr Leu Glu Gln Leu Thr Glu Lys Lys Ile Lys His Leu Glu
          450          455          460
Gln Gly Tyr Arg Glu Arg Leu Ser Leu Leu Arg Ser Glu Val Glu Ala
465          470          475          480
Glu Arg Glu Leu Phe Trp Glu Gln Ala His Arg Gln Arg Ala Ala Leu
          485          490          495
Glu Trp Asp Val Gly Arg Leu Gln Ala Glu Glu Ala Gly Leu Arg Glu
          500          505          510
Lys Leu Thr Leu Ala Leu Lys Glu Asn Ser Arg Leu Gln Lys Glu Ile
          515          520          525
Val Glu Val Val Glu Lys Leu Ser Asp Ser Glu Arg Leu Ala Leu Lys
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Leu Gln Lys Asp Leu Glu Phe Val Leu Lys Asp Lys Leu Glu Pro Gln
545          550          555          560
Ser Ala Glu Leu Leu Ala Gln Glu Glu Arg Phe Ala Ala Val Leu Lys
          565          570          575
Glu Tyr Glu Leu Lys Cys Arg Asp Leu Gln Asp Arg Asn Asp Glu Leu
          580          585          590
Gln Ala Glu Leu Glu Gly Leu Trp Ala Arg Leu Pro Lys Asn Arg His
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Ser Pro Ser Trp Ser Pro Asp Gly Arg Arg Arg Gln Leu Pro Gly Leu
          610          615          620
Gly Pro Ala Gly Ile Ser Phe Leu Gly Asn Ser Ala Pro Val Ser Ile
625          630          635          640
Glu Thr Glu Leu Met Met Glu Gln Val Lys Glu His Tyr Gln Asp Leu
          645          650          655
Arg Thr Gln Leu Glu Thr Lys Val Asn Tyr Tyr Glu Arg Glu Ile Ala
          660          665          670
Ala Leu Lys Arg Asn Phe Glu Lys Glu Arg Lys Asp Met Glu Gln Ala
          675          680          685
Arg Arg Arg Glu Val Ser Val Leu Glu Gly Gln Lys Ala Asp Leu Glu
          690          695          700
Glu Leu His Glu Lys Ser Gln Glu Val Ile Trp Gly Leu Gln Glu Gln
705          710          715          720
Leu Gln Asp Thr Ala Arg Gly Pro Glu Pro Glu Gln Met Gly Leu Ala
          725          730          735
Pro Cys Cys Thr Gln Ala Leu Cys Gly Leu Ala Leu Arg His His Ser
          740          745          750
His Leu Gln Gln Ile Arg Arg Glu Ala Glu Ala Glu Leu Ser Gly Glu
          755          760          765
Leu Ser Gly Leu Gly Ala Leu Pro Ala Arg Arg Asp Leu Thr Leu Glu
          770          775          780
Leu Glu Glu Pro Pro Gln Gly Pro Leu Pro Arg Gly Ser Gln Arg Ser
785          790          795          800
Glu Gln Leu Glu Leu Glu Arg Ala Leu Lys Leu Gln Pro Cys Ala Ser
          805          810          815
Glu Lys Arg Ala Gln Met Cys Val Ser Leu Ala Leu Glu Glu Glu Glu

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4541

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Asp Arg Val Ala Glu Leu His Arg Leu Leu Ser Leu Gln Gly Glu Gln		1280
	1285	1290
Ala Arg Arg Arg Leu Asp Ala Gln Arg Glu Glu His Glu Lys Gln Leu		1295
	1300	1305
Lys Ala Thr Glu Glu Arg Val Glu Glu Ala Glu Met Ile Leu Lys Asn		1310
	1315	1320
Met Glu Met Leu Leu Gln Glu Lys Val Asp Lys Leu Lys Glu Gln Phe		1325
	1330	1335
Glu Lys Asn Thr Lys Ser Asp Leu Leu Leu Lys Glu Leu Tyr Val Glu		1340
1345	1350	1355
Asn Ala His Leu Val Arg Ala Leu Gln Ala Thr Glu Glu Lys Gln Arg		1360
	1365	1370
Gly Ala Glu Lys Gln Ser Arg Leu Leu Glu Glu Lys Val Arg Ala Leu		1375
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Asn Lys Leu Val Ser Arg Ile Ala Pro Ala Ala Leu Ser Val		1390
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<210> 5361

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 5361

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120

gggttctctg ggctccggc agatggagga tggcattaaa tgccaacaca gtcagcttac

180

catccacaag gccagcagct gccaacagct gccctagacc tatcaacaag acaacttcat

240

ggctcccaat gggaatggag gctgggccc cctacttag agcaggggaa agaacttttc

300

cctcaaagag cgggggcagg atgccagaat ctaactacat cctctcccgg tttgcagttc

360

taggaagtgg aatttgctgc cctaggcgtg gtctaaagga caagtttaga aatgattcaa

420

ctcaagttcc taaacagagt aagtgccagt tgatgtccca ccgtggatcc tttactocag

480

aaaaattgta atgatggctc ggccaccgcc ttggctagag tccactgca cgcgtgtcgt

540

gagggccgat gggcaagtcc gtccggtttt tttgttggt gttgttggt tttgagatgg

600

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660

ccgcctctg ggttcaaagg attctctgt ctcagcctcc tgagtagctg ggattacagg

720

caccgccag caccgccag tttttttgt attttagta gagacgggg tttatcatgt

780

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840

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 960
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<210> 5362

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5362

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			20					25					30		
Trp	Ala	Ser	Pro	Ser	Gly	Phe	Phe	Cys	Cys	Cys	Cys	Cys	Phe	Leu	Arg
		35				40						45			
Trp	Ser	Leu	Ala	Leu	Xaa	Ala	Gln	Thr	Glu	Val	Gln	Arg	Pro	Asp	Leu
		50				55					60				
Asn	Ser	Leu	Gln	Pro	Pro	Pro	Gly	Phe	Lys	Gly	Phe	Ser	Cys	Leu	
65					70				75					80	
Ser	Leu	Leu	Ser	Ser	Trp	Asp	Tyr	Arg	His	Pro	Pro	Ala	Arg	Pro	Ala
				85				90					95		
Phe	Phe	Cys	Ile	Phe	Ser	Arg	Asp	Gly	Val	Leu	Ser	Cys	Trp	Pro	Gly
			100					105					110		
Trp	Ser	Arg	Thr	Pro	Asp	Leu	Met	Xaa	Ser	Thr	Arg	Leu	Gly	Leu	Pro
			115				120					125			
Asn	Cys	Trp	Asp	His	Arg	Arg	Glu	Pro	Pro	Arg	Pro	Ala	Val	Cys	Leu
		130				135					140				
Val	Phe	Lys	Pro	Ile	Asn	Glu	Pro	Val	Ser	Leu	Phe	Gly	Ile	Tyr	Asn
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Asn	Glu	Lys	Ile	His											
				165											

<210> 5363

<211> 894

<212> DNA

<213> Homo sapiens

<400> 5363

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 780
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<210> 5364

<211> 187

<212> PRT

<213> Homo sapiens

<400> 5364

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Arg	Trp	Arg	Lys	Arg	Ala	Leu	Gly	Arg	Leu	Gln	Gly	Xaa	Gly	Pro	Gln
			20					25					30		
Pro	Gly	Leu	Tyr	Ser	Tyr	Ile	Arg	Asp	Asp	Leu	Phe	Thr	Ser	Glu	Ile
		35					40					45			
Phe	Lys	Leu	Glu	Leu	Gln	Asn	Ala	Pro	Arg	His	Ala	Ser	Phe	Ser	Asp
	50					55					60				
Val	Arg	Arg	Phe	Leu	Gly	Arg	Phe	Gly	Leu	Gln	Pro	His	Lys	Thr	Lys
65					70					75				80	
Leu	Phe	Gly	Gln	Pro	Pro	Cys	Ala	Phe	Val	Thr	Phe	Arg	Ser	Ala	Ala
				85					90					95	
Glu	Arg	Asp	Lys	Ala	Leu	Arg	Val	Leu	His	Gly	Ala	Leu	Trp	Lys	Gly
			100						105				110		
Arg	Pro	Leu	Ser	Val	Ala	Trp	Pro	Gly	Pro	Arg	Pro	Thr	Pro	Trp	Pro
		115					120					125			
Gly	Gly	Gly	Xaa	Gln	Glu	Gly	Glu	Ser	Glu	Pro	Pro	Val	Thr	Arg	Xaa
	130					135					140				
Gly	Arg	Arg	Gly	Asp	Pro	Ser	Met	Asp	Ser	Ala	Leu	Xaa	Leu	Ser	Ser
145					150					155				160	
Leu	Ser	Gly	Ser	Ser	Trp	Ser	Ala	Ser	Arg	Cys	Cys	Arg	Asn	Xaa	Ala
				165					170					175	
Gln	Glu	Ile	Gly	Ser	Thr	Asn	Arg	Ala	Leu	Arg					
			180						185						

<210> 5365

<211> 1824

<212> DNA

<213> Homo sapiens

<400> 5365

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<210> 5366

<211> 477

<212> PRT

<213> Homo sapiens

<400> 5366

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Ser	Ile	Cys	Leu	Asp	Tyr	Phe	Thr	Asp	Pro	Val	Met	Thr	Thr	Cys	Gly
			20					25					30		
His	Asn	Phe	Cys	Arg	Ala	Cys	Ile	Gln	Leu	Ser	Trp	Glu	Lys	Ala	Arg
		35					40					45			
Gly	Lys	Lys	Gly	Arg	Arg	Lys	Arg	Lys	Gly	Ser	Phe	Pro	Cys	Pro	Glu
	50					55					60				
Cys	Arg	Glu	Met	Ser	Pro	Gln	Arg	Asn	Leu	Leu	Pro	Asn	Arg	Leu	Leu
65					70				75					80	
Thr	Lys	Val	Ala	Glu	Met	Ala	Gln	Gln	His	Pro	Gly	Leu	Gln	Lys	Gln
				85					90					95	
Asp	Leu	Cys	Gln	Glu	His	His	Glu	Pro	Leu	Lys	Leu	Phe	Cys	Gln	Lys
			100					105					110		
Asp	Gln	Ser	Pro	Ile	Cys	Val	Val	Cys	Arg	Glu	Ser	Arg	Glu	His	Arg
		115					120					125			
Leu	His	Arg	Val	Leu	Pro	Ala	Glu	Glu	Ala	Val	Gln	Gly	Tyr	Lys	Leu
	130					135					140				
Lys	Leu	Glu	Glu	Asp	Met	Glu	Tyr	Leu	Arg	Glu	Gln	Ile	Thr	Arg	Thr
145					150					155				160	
Gly	Asn	Leu	Gln	Ala	Arg	Glu	Glu	Gln	Ser	Leu	Ala	Glu	Trp	Gln	Gly
			165					170						175	
Lys	Val	Lys	Glu	Arg	Arg	Glu	Arg	Ile	Val	Leu	Glu	Phe	Glu	Lys	Met
		180					185					190			
Asn	Leu	Tyr	Leu	Val	Glu	Glu	Glu	Gln	Arg	Leu	Leu	Gln	Ala	Leu	Glu
	195						200					205			
Thr	Glu	Glu	Glu	Glu	Thr	Ala	Ser	Arg	Leu	Arg	Glu	Ser	Val	Ala	Cys
	210					215					220				
Leu	Asp	Arg	Gln	Gly	His	Ser	Leu	Glu	Leu	Leu	Leu	Gln	Leu	Glu	
225					230				235					240	
Glu	Arg	Ser	Thr	Gln	Gly	Pro	Leu	Gln	Met	Leu	Gln	Asp	Met	Lys	Glu
			245					250					255		
Pro	Leu	Ser	Arg	Lys	Asn	Asn	Val	Ser	Val	Gln	Cys	Pro	Glu	Val	Ala
		260						265					270		
Pro	Pro	Thr	Arg	Pro	Arg	Thr	Val	Cys	Arg	Val	Pro	Gly	Gln	Ile	Glu

275	280	285
Val Leu Arg Gly Phe Leu Glu Asp Val Val Pro Asp Ala Thr Ser Ala		
290	295	300
Tyr Pro Tyr Leu Leu Leu Tyr Glu Ser Arg Gln Arg Arg Tyr Leu Gly		
305	310	315
Ser Ser Pro Glu Gly Ser Gly Phe Cys Ser Lys Asp Arg Phe Val Ala		
	325	330
Tyr Pro Cys Ala Val Gly Gln Thr Ala Phe Ser Ser Gly Arg His Tyr		
	340	345
Trp Glu Val Gly Met Asn Ile Thr Gly Asp Ala Leu Trp Ala Leu Gly		
	355	360
Val Cys Arg Asp Asn Val Ser Arg Lys Asp Arg Val Leu Lys Cys Pro		
	370	375
Glu Asn Gly Phe Trp Val Val Gln Leu Ser Lys Gly Thr Lys Tyr Leu		
385	390	395
Ser Thr Phe Ser Ala Leu Thr Pro Val Met Leu Met Glu Pro Pro Ser		
	405	410
His Met Gly Ile Phe Leu Asp Phe Glu Ala Gly Glu Val Ser Phe Tyr		
	420	425
Ser Val Ser Asp Gly Ser His Leu His Thr Tyr Ser Gln Ala Thr Phe		
	435	440
Pro Gly Pro Leu Gln Pro Phe Cys Leu Gly Ala Pro Lys Ser Gly		
	450	455
Gln Met Val Ile Ser Thr Val Thr Met Trp Val Lys Gly		
465	470	475

<210> 5367

<211> 549

<212> DNA

<213> Homo sapiens

<400> 5367

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120
gagtctcagg ggctggggat gctgcccccg aagcccccta cttttgggga gtctctgtcc
180
cagcacaaag ctgaggccag cagccgcaga aggagaaaga gcagtcggcc ccaggccaag
240
gcagcgccca gggcctacag tgaccatgat gaccgctggg agacaaaaga aggggcagca
300
tccccagccc ctgagactcc acagcctact tccccgaga cttcccccaa ggagacaccc
360
atgcagccac ccgagatccc agctcctgcc caccggcctc ctgaagacga gggggaagag
420
aatgaggggg aagaggatga agaattgggag gacataagtg aggatgagga agaggaggag
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540
gccccacc
549

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<210> 5368

<211> 137

<212> PRT

<213> Homo sapiens

<400> 5368

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Met Leu Pro Pro Lys Pro Pro Thr Phe Gly Glu Phe Leu Ser Gln His
 1           5           10           15
Lys Ala Glu Ala Ser Ser Arg Arg Arg Lys Ser Ser Arg Pro Gln
          20           25           30
Ala Lys Ala Ala Pro Arg Ala Tyr Ser Asp His Asp Asp Arg Trp Glu
          35           40           45
Thr Lys Glu Gly Ala Ala Ser Pro Ala Pro Glu Thr Pro Gln Pro Thr
          50           55           60
Ser Pro Glu Thr Ser Pro Lys Glu Thr Pro Met Gln Pro Pro Glu Ile
          65           70           75           80
Pro Ala Pro Ala His Arg Pro Pro Glu Asp Glu Gly Glu Glu Asn Glu
          85           90           95
Gly Glu Glu Asp Glu Glu Trp Glu Asp Ile Ser Glu Asp Glu Glu Glu
          100          105          110
Glu Glu Ile Glu Val Glu Glu Gly Asp Glu Glu Glu Pro Ala Gln Asp
          115          120          125
His Gln Ala Pro Glu Ala Ala Pro Thr
          130          135

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<210> 5369

<211> 646

<212> DNA

<213> Homo sapiens

<400> 5369

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120
cagcagcagc agctcctgca gcccgggccc tcgcccgtgg gcagcagcgg gcccgagccc
180
cccggggggc agcccgacgg catgaaggac ctggacgcca tcaaactctt cgtgggcccag
240
atcccgccgc acctggacga gaaggacctc aagccgtct tcgagcagtt cggccgcate
300
tacgagctca cgggtctcaa agaccctac acggggatgc acaaaggtgg gcgcccggcc
360
ccctcccccc tctccccctc cctccgctc ccacccacc ttccggcacc ttctctcccc
420
catcaccatc cctctctg ctaacctcct cctctgctg cctctgccg agcatcggtt
480
cttaccctcc cctccacc caccctcct cccctctctg ggggtgcagc tgacagatcc
540
gagcgggccc cctccccctc tcgccccct cctccctc cccaccttc cggcatctcc
600
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646

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<210> 5370

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5370

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Met Lys Asp Leu Asp Ala Ile Lys Leu Phe Val Gly Gln Ile Pro Arg
 1           5           10           15
His Leu Asp Glu Lys Asp Leu Lys Pro Leu Phe Glu Gln Phe Gly Arg
      20           25           30
Ile Tyr Glu Leu Thr Val Leu Lys Asp Pro Tyr Thr Gly Met His Lys
      35           40           45
Gly Gly Arg Pro Ala Pro Ser Pro Leu Ser Pro Ser Leu Arg Leu Pro
      50           55           60
Pro His Leu Pro Ala Ser Ser Leu Pro His His His Pro Ser Ser Ala
      65           70           75           80
His Leu Pro Pro Leu Pro Ala Ser Ala Gly Ala Ser Val Leu Thr Pro
      85           90           95
Ser Leu Pro Pro Thr Pro Pro Pro Leu Ser Gly Gly Ala Ala Asp Arg
      100          105          110
Ser Glu Arg Ala Pro Ser Pro Pro Pro Pro Pro Leu Pro Pro Ser Pro
      115          120          125
Pro Ser Gly Ile Ser Ser Leu Ser Pro Ser Leu Ser Pro Ser Leu Ser
      130          135          140
Pro Phe Leu Phe
145

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<210> 5371

<211> 1177

<212> DNA

<213> Homo sapiens

<400> 5371

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120
tccacgc cgt ccaactgtcct cagcgaccag gccaaagtatc taaacccctt actgggagag
180
tggaagcact tcaactgcctc cctggccccc cgcatgtcca accagggcat cgcggtgctc
240
aacaacttcg tatacttgat tggaggggac aacaatgtcc aaggatttcg agcagagtc
300
cgatgctgga ggtatgaccc acggcacaac cgctggnttc cagatccagt ccctgcagca
360
ggagcacgcc gacctgtcnn cgtgtgtgtt gtaggcaggt acatctacgc tgtggcgggc
420
cgtgactacc acaatgacct gaatgctgtg gagcgctacg accctgccac caactcctgg
480
gcatacgtgg cccactcaa gagggaggtg tatgcccacg caggcgcgac gctggagggg
540
aagatgtata tcacctgcgg ccgcagaggg gaggattacc tgaaagagac aactgctac
600
gatccaggca gcaacacttg gcacacactg gctgatgggc ctgtgcggcg cgcttggcac
660

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ggcattggcaa ccctcctcaa caagctgtat gtgacgggg gcagcaacaa cgatgccgga
 720
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 780
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 840
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 900
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 1020
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 1177

<210> 5372

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5372

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Pro	Ser	Leu	Gln	Ser	Pro	Gln	Thr	Glu	Leu	Arg	Ser	Asp	Phe	Gln	Cys
		20						25					30		
Val	Val	Gly	Phe	Gly	Gly	Ile	His	Ser	Thr	Pro	Ser	Thr	Val	Leu	Ser
		35					40					45			
Asp	Gln	Ala	Lys	Tyr	Leu	Asn	Pro	Leu	Leu	Gly	Glu	Trp	Lys	His	Phe
	50					55				60					
Thr	Ala	Ser	Leu	Ala	Pro	Arg	Met	Ser	Asn	Gln	Gly	Ile	Ala	Val	Leu
65					70					75				80	
Asn	Asn	Phe	Val	Tyr	Leu	Ile	Gly	Gly	Asp	Asn	Asn	Val	Gln	Gly	Phe
			85					90					95		
Arg	Ala	Glu	Ser	Arg	Cys	Trp	Arg	Tyr	Asp	Pro	Arg	His	Asn	Arg	Trp
		100						105				110			
Xaa	Pro	Asp	Pro	Val	Pro	Ala	Ala	Gly	Ala	Arg	Arg	Pro	Val	Xaa	Val
	115					120						125			
Cys	Val	Val	Gly	Arg	Tyr	Ile	Tyr	Ala	Val	Ala	Gly	Arg	Asp	Tyr	His
	130					135				140					
Asn	Asp	Leu	Asn	Ala	Val	Glu	Arg	Tyr	Asp	Pro	Ala	Thr	Asn	Ser	Trp
145				150					155					160	
Ala	Tyr	Val	Ala	Pro	Leu	Lys	Arg	Glu	Val	Tyr	Ala	His	Ala	Gly	Ala
			165					170						175	
Thr	Leu	Glu	Gly	Lys	Met	Tyr	Ile	Thr	Cys	Gly	Arg	Arg	Gly	Glu	Asp
		180						185				190			
Tyr	Leu	Lys	Glu	Thr	His	Cys	Tyr	Asp	Pro	Gly	Ser	Asn	Thr	Trp	His
	195					200						205			
Thr	Leu	Ala	Asp	Gly	Pro	Val	Arg	Arg	Ala	Trp	His	Gly	Met	Ala	Thr
	210					215						220			
Leu	Leu	Asn	Lys	Leu	Tyr	Val	Ile	Gly	Gly	Ser	Asn	Asn	Asp	Ala	Gly


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<210> 5373
<211> 4221
<212> DNA
<213> Homo sapiens
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4551

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1020
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1080
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1140
acagattttt ctggaattgt gctggaaaaa aaaacttcag aagaaggcac ctcagaagag
1200
aataaagctc ctgagaatgt tacctgcact atacctgatg gcgtgccaat agatatcaca
1260
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1320
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1380
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1440
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<210> 5374

<211> 886

<212> PRT

<213> Homo sapiens

<400> 5374

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Ser	Phe	Glu	Glu	Phe	Glu	Arg	Arg	Arg	Glu	Glu	Arg	Lys	Thr	Arg	Glu
		20						25				30			
Lys	Lys	Ser	Leu	Gln	Glu	Lys	Gly	Lys	Leu	Ser	Ala	Glu	Glu	Asn	Pro
		35				40					45				
Asp	Asp	Ser	Glu	Val	Pro	Ser	Ser	Ser	Gly	Ile	Asn	Ser	Thr	Lys	Ser
	50					55				60					
Gln	Asp	Lys	Asp	Val	Asn	Glu	Gly	Glu	Thr	Ser	Asp	Gly	Val	Arg	Lys
65					70				75					80	
Ser	Val	His	Lys	Val	Phe	Ala	Ser	Met	Leu	Gly	Glu	Asn	Glu	Asp	Asp
			85					90					95		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Thr
			100					105					110		
Pro	Glu	Gln	Pro	Thr	Ala	Gly	Asp	Val	Phe	Val	Leu	Glu	Met	Val	Leu
		115					120					125			
Asn	Arg	Glu	Thr	Lys	Lys	Met	Met	Lys	Glu	Lys	Arg	Pro	Arg	Ser	Lys
	130					135					140				
Leu	Pro	Arg	Ala	Leu	Arg	Gly	Leu	Met	Gly	Glu	Ala	Asn	Ile	Arg	Phe
145					150				155					160	
Ala	Arg	Gly	Glu	Arg	Glu	Glu	Ala	Ile	Leu	Met	Cys	Met	Glu	Ile	Ile
			165					170					175		
Arg	Gln	Ala	Pro	Leu	Ala	Tyr	Glu	Pro	Phe	Ser	Thr	Leu	Ala	Met	Ile
		180						185					190		
Tyr	Glu	Asp	Gln	Gly	Asp	Met	Glu	Lys	Ser	Leu	Gln	Phe	Glu	Leu	Ile
	195					200					205				
Ala	Ala	His	Leu	Asn	Pro	Ser	Asp	Thr	Glu	Glu	Trp	Val	Arg	Leu	Ala
	210					215					220				
Glu	Met	Ser	Leu	Glu	Gln	Asp	Asn	Ile	Lys	Gln	Ala	Ile	Phe	Cys	Tyr
225					230				235					240	
Thr	Lys	Ala	Leu	Lys	Tyr	Glu	Pro	Thr	Asn	Val	Arg	Tyr	Leu	Trp	Glu
			245					250					255		
Arg	Ser	Ser	Leu	Tyr	Glu	Gln	Met	Gly	Asp	His	Lys	Met	Ala	Met	Asp
		260						265					270		
Gly	Tyr	Arg	Arg	Ile	Leu	Asn	Leu	Leu	Ser	Pro	Ser	Asp	Gly	Glu	Arg
	275					280						285			
Phe	Met	Gln	Leu	Ala	Arg	Asp	Met	Ala	Lys	Ser	Tyr	Tyr	Glu	Ala	Asn
	290					295					300				
Asp	Val	Thr	Ser	Ala	Ile	Asn	Ile	Ile	Asp	Glu	Ala	Phe	Ser	Lys	His
305					310				315					320	
Gln	Gly	Leu	Val	Ser	Met	Glu	Asp	Val	Asn	Ile	Ala	Ala	Glu	Leu	Tyr
			325					330					335		
Ile	Ser	Asn	Lys	Gln	Tyr	Asp	Lys	Ala	Leu	Glu	Ile	Ile	Thr	Asp	Phe

	340		345		350
Ser Gly Ile Val Leu Glu Lys Lys Thr Ser Glu Glu Gly Thr Ser Glu					
	355		360		365
Glu Asn Lys Ala Pro Glu Asn Val Thr Cys Thr Ile Pro Asp Gly Val					
	370		375		380
Pro Ile Asp Ile Thr Val Lys Leu Met Val Cys Leu Val His Leu Asn					
385		390		395	400
Ile Leu Glu Pro Leu Asn Pro Leu Leu Thr Thr Leu Val Glu Gln Asn					
	405		410		415
Pro Glu Asp Met Gly Asp Leu Tyr Leu Asp Val Ala Glu Ala Phe Leu					
	420		425		430
Asp Val Gly Glu Tyr Asn Ser Ala Leu Pro Leu Leu Ser Ala Leu Val					
	435		440		445
Cys Ser Glu Arg Tyr Asn Leu Ala Val Val Trp Leu Arg His Ala Glu					
	450		455		460
Cys Leu Lys Ala Leu Gly Tyr Met Glu Arg Ala Ala Glu Ser Tyr Gly					
465		470		475	480
Lys Val Val Asp Leu Ala Pro Leu His Leu Asp Ala Arg Ile Ser Leu					
	485		490		495
Ser Thr Leu Gln Gln Gln Leu Gly Gln Pro Glu Lys Ala Leu Glu Ala					
	500		505		510
Leu Glu Pro Met Tyr Asp Pro Asp Thr Leu Ala Gln Asp Ala Asn Ala					
	515		520		525
Ala Gln Gln Glu Leu Lys Leu Leu Leu His Arg Ser Thr Leu Leu Phe					
	530		535		540
Ser Gln Gly Lys Met Tyr Gly Tyr Val Asp Thr Leu Leu Thr Met Leu					
545		550		555	560
Ala Met Leu Leu Lys Val Ala Met Asn Arg Ala Gln Val Cys Leu Ile					
	565		570		575
Ser Ser Ser Lys Ser Gly Glu Arg His Leu Tyr Leu Ile Lys Val Ser					
	580		585		590
Arg Asp Lys Ile Ser Asp Ser Asn Asp Gln Glu Ser Ala Asn Cys Asp					
	595		600		605
Ala Lys Ala Ile Phe Ala Val Leu Thr Ser Val Leu Thr Lys Asp Asp					
	610		615		620
Trp Trp Asn Leu Leu Leu Lys Ala Ile Tyr Ser Leu Cys Asp Leu Ser					
625		630		635	640
Arg Phe Gln Glu Ala Glu Leu Leu Val Asp Ser Ser Leu Glu Tyr Tyr					
	645		650		655
Ser Phe Tyr Asp Asp Arg Gln Lys Arg Lys Glu Leu Glu Tyr Phe Gly					
	660		665		670
Leu Ser Ala Ala Ile Leu Asp Lys Asn Phe Arg Lys Ala Tyr Asn Tyr					
	675		680		685
Ile Arg Ile Met Val Met Glu Asn Val Asn Lys Pro Gln Leu Trp Asn					
	690		695		700
Ile Phe Asn Gln Val Thr Met His Ser Gln Asp Val Arg His His Arg					
705		710		715	720
Phe Cys Leu Arg Leu Met Leu Lys Asn Pro Glu Asn His Ala Leu Cys					
	725		730		735
Val Leu Asn Gly His Asn Ala Phe Val Ser Gly Ser Phe Lys His Ala					
	740		745		750
Leu Gly Gln Tyr Val Gln Ala Phe Arg Thr His Pro Asp Glu Pro Leu					
	755		760		765
Tyr Ser Phe Cys Ile Gly Leu Thr Phe Ile His Met Ala Ser Gln Lys					

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      770              775              780
Tyr Val Leu Arg Arg His Ala Leu Ile Val Gln Gly Phe Ser Phe Leu
785              790              795              800
Asn Arg Tyr Leu Ser Leu Arg Gly Pro Cys Gln Glu Ser Phe Tyr Asn
      805              810              815
Leu Gly Arg Gly Leu His Gln Leu Gly Leu Ile His Leu Ala Ile His
      820              825              830
Tyr Tyr Gln Lys Ala Leu Glu Leu Pro Pro Leu Val Val Glu Gly Ile
      835              840              845
Glu Leu Asp Gln Leu Asp Leu Arg Arg Asp Ile Ala Tyr Asn Leu Ser
      850              855              860
Leu Ile Tyr Gln Ser Ser Gly Asn Thr Gly Met Ala Gln Thr Leu Leu
865              870              875              880
Tyr Thr Tyr Cys Ser Ile
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<210> 5375

<211> 526

<212> DNA

<213> Homo sapiens

<400> 5375

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120
tggtaacgat ctgtcttctg caaatgggtt acagcgtgct gctgccagtt ctgaatcccc
180
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240
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360
catgtcccca ttttacagga gtggtgatta aggctcaaag gatggaggtg atggatcaaa
420
gtcgtctgcc aagtgggtgc agcattggtt ctcagaccga ggcccgtcta cacagtgtctg
480
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526

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<210> 5376

<211> 112

<212> PRT

<213> Homo sapiens

<400> 5376

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Arg Ala Ser Arg Val Leu Ser Gly Asn Asp Leu Ser Ser Ala Asn Gly
      20              25              30
Leu Gln Arg Ala Ala Ala Ser Ser Glu Ser Pro Val Ala Arg Thr Trp
      35              40              45
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<212> DNA

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<212> DNA

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<210> 5384

<211> 508

<212> PRT

<213> Homo sapiens

<400> 5384

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 Leu Phe Ile Pro Ser Thr Glu Asn Glu Glu Gln Arg Leu Ala Ser Ala

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Arg Ala Val Pro Arg Asn Val Gln Pro Tyr Val Val Tyr Glu Glu Val		
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Thr Asn Val Trp Ile Asn Val His Asp Ile Phe Tyr Pro Phe Pro Gln		80
	85	90
Ser Glu Gly Glu Asp Glu Leu Cys Phe Leu Arg Ala Asn Glu Cys Lys		95
	100	105
Thr Gly Phe Cys His Leu Tyr Lys Val Thr Ala Val Leu Lys Ser Gln		110
	115	120
Gly Tyr Asp Trp Ser Glu Pro Phe Ser Pro Gly Glu Gly Glu Gln Ser		125
	130	135
Leu Thr Asn Ala Ile Trp Val Asn Glu Glu Thr Lys Leu Val Tyr Phe		140
	145	150
Gln Gly Thr Lys Asp Thr Pro Leu Glu His His Leu Tyr Val Val Ser		155
	165	170
Tyr Glu Ala Ala Gly Glu Ile Val Arg Leu Thr Thr Pro Gly Phe Ser		175
	180	185
His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His Tyr		190
	195	200
Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser Gly		205
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Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser Met		220
	225	230
Met Glu Ala Ala Lys Ile Phe His Phe His Thr Arg Ser Asp Val Arg		235
	245	250
Leu Tyr Gly Met Ile Tyr Lys Pro His Ala Leu Gln Pro Gly Lys Lys		255
	260	265
His Pro Thr Val Leu Phe Val Tyr Gly Gly Pro Gln Val Gln Leu Val		270
	275	280
Asn Asn Ser Phe Lys Gly Ile Lys Tyr Leu Arg Leu Asn Thr Leu Ala		285
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Ser Leu Gly Tyr Ala Val Val Val Ile Asp Gly Arg Gly Ser Cys Gln		300
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Arg Gly Leu Arg Phe Glu Gly Ala Leu Lys Asn Gln Met Gly Gln Val		315
	325	330
Glu Ile Glu Asp Gln Val Glu Gly Leu Gln Phe Val Ala Glu Lys Tyr		335
	340	345
Gly Phe Ile Asp Leu Ser Arg Val Ala Ile His Gly Trp Ser Tyr Gly		350
	355	360
Gly Phe Leu Ser Leu Met Gly Leu Ile His Lys Pro Gln Val Phe Lys		365
	370	375
Val Ala Ile Ala Gly Ala Pro Val Thr Val Trp Met Ala Tyr Asp Thr		380
	385	390
Gly Tyr Thr Glu Arg Tyr Met Asp Val Pro Glu Asn Asn Gln His Gly		395
	405	410
Tyr Glu Ala Gly Ser Val Ala Leu His Val Glu Lys Leu Pro Asn Glu		415
	420	425
Pro Asn Arg Leu Leu Ile Leu His Gly Phe Leu Asp Glu Asn Val His		430
	435	440
Phe Phe His Thr Asn Phe Leu Val Ser Gln Leu Ile Arg Ala Gly Lys		445
	450	455
Pro Tyr Gln Leu Gln Val Ala Leu Pro Pro Val Ser Pro Gln Ile Tyr		460
	465	470
Pro Asn Glu Arg His Ser Ile Arg Cys Pro Glu Ser Gly Glu His Tyr		475
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 <211> 314
 <212> DNA
 <213> Homo sapiens

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<210> 5386
 <211> 100
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 <213> Homo sapiens

<400> 5386
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 35 40 45
 Ala Gly Trp Leu Ala Arg Leu Gly Gln Pro Gly Leu Leu Gly Pro Tyr
 50 55 60
 Ala Ala Pro Thr Phe His Phe Leu Glu Met His Pro His Leu Gln Glu
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<210> 5387
 <211> 375
 <212> DNA
 <213> Homo sapiens

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<210> 5388

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5388

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Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Met	Thr	Leu	Ile	Ile	Leu	Ile	Val
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Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe	Cys	Leu	Ser	Ala	Ser
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<211> 1711

<212> DNA

<213> Homo sapiens

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<210> 5390

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5390

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      50      55      60
Pro Lys Asn Ser Ser Val Ile Val Arg Arg Ile Pro Ile Gly Gly Val
65      70      75      80
Lys Ser Thr Ser Lys Thr Tyr Val Ile Ser Arg Thr Glu Pro Ala Met
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<210> 5391

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<212> DNA

<213> Homo sapiens

<400> 5391

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<211> 55

<212> PRT

<213> Homo sapiens

<400> 5392

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<210> 5393

<211> 4837

<212> DNA

<213> Homo sapiens

<400> 5393

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<211> 354

<212> PRT

<213> Homo sapiens

<400> 5394

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His	Glu	Met	Leu	Lys	Lys	Gly	Trp	Asp	Ala	Glu	Gly	Ser	Pro	Phe	Arg				
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<210> 5395

<211> 3711

<212> DNA

<213> Homo sapiens

<400> 5395

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Ala	Ile	Val	Glu	Ile	Phe	Ser	Lys	Tyr	Gln	Lys	Ala	Ala	Glu	Glu	Thr
		35					40					45			
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	50					55					60				
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 Ala Ser Gly Ala Lys Ala Asp Gln Glu Glu Ile His Pro Arg Ser
 115 120 125
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 Ile Lys Asp Gly Glu Asp Leu Lys Asp His Ser Thr Glu Ser Lys Lys
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 260 265 270
 Lys Tyr Gln Ala Ala Val Ser Lys Gln Ser Ser Ser Thr Asn Tyr Thr
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 305 310 315 320
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 Leu Trp Ala Ser Lys Asn Glu Asn Glu Glu Ile Leu Glu Arg Pro Ala
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<212> DNA
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Ile	Ser	Thr	Glu	Gly	Leu	Ser	Ala	Ser	Phe	Asp	Leu	Phe	Gln	Ser	Phe
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<213> Homo sapiens

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<211> 186

<212> PRT

<213> Homo sapiens

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			85						90					95	
Gln	Gly	Val	Ser	Gly	Tyr	Cys	Gln	Gln	Gly	Gln	Gln	Pro	Tyr	Tyr	Ser
		100							105				110		
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<212> DNA

<213> Homo sapiens

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<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
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Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
			50			55					60				
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
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Ser	Thr	Lys	Leu	Ser	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser
					85				90					95	
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

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      100      105      110
Leu Thr Asp Ala Ser Ala Cys Lys Asn Ile Leu Arg Phe Ile Gln Phe
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      130      135      140
Lys Leu Ser Asp Met His Gln Ile Val Asn Ile Asp Leu Met Leu Glu
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Met Ser Thr Ser Leu Ala Val Thr Pro Ile Ile Glu Arg Glu Ser
      165      170      175
Gly Gly His His Tyr Val Asn Met Thr Leu Pro Val Asp Ala Val Ile
      180      185      190
Ser Val Ala Pro Glu Glu Thr Trp Gly Lys Val Arg Lys Leu Leu Val
      195      200      205
Asp Ala Ile His Asn Gln Leu Thr Asp Met Glu Lys Cys Ile Leu Lys
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Tyr Met Lys Arg Thr Ser Ile Val Val Pro Glu Pro Leu His Phe Leu
      225      230      235      240
Leu Pro Gly Lys Lys Asn Leu Val Thr Ile Ser Tyr Pro Ser Gly Ile
      245      250      255
Pro Asp Gly Gln Leu Gln Ala Tyr Arg Lys Glu Leu His Asp Leu Phe
      260      265      270
Asn Leu Pro His Asp Arg Pro Tyr Phe Lys Arg Ser Asn Ala Tyr His
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Phe Pro Asp Glu Pro Tyr Lys Asp Gly Tyr Ile Arg Asn Pro His Thr
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Tyr Leu Asn Pro Pro Asn Met Glu Thr Gly Met Ile Tyr Val Val Gln
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Gly Ile Tyr Gly Tyr His His Tyr Met Gln Asp Arg Ile Asp Asp Asn
      325      330      335
Gly Trp Gly Cys Ala Tyr Arg Ser Leu Gln Thr Ile Cys Ser Trp Phe
      340      345      350
Lys His Gln Gly Tyr Thr Glu Arg Ser Ile Pro Thr His Arg Glu Ile
      355      360      365
Gln Gln Ala Leu Val Asp Ala Gly Asp Lys Pro Ala Thr Phe Val Gly
      370      375      380
Ser Arg Gln Trp Ile Gly Ser Ile Glu Val Gln Leu Val Leu Asn Gln
      385      390      395      400
Leu Ile Gly Ile Thr Ser Lys Ile Leu Phe Val Ser Gln Gly Ser Glu
      405      410      415
Ile Ala Ser Gln Gly Arg Glu Leu Ala Asn His Phe Gln Ser Glu Gly
      420      425      430
Thr Pro Val Met Ile Gly Gly Gly Val Leu Ala His Thr Ile Leu Gly
      435      440      445
Val Ala Trp Asn Glu Ile Thr Gly Gln Ile Lys Phe Leu Ile Leu Asp
      450      455      460
Pro His Tyr Thr Gly Ala Glu Asp Leu Gln Val Ile Leu Glu Lys Gly
      465      470      475      480
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<210> 5403

<211> 451

<212> DNA

<213> Homo sapiens

<400> 5403

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<210> 5404

<211> 150

<212> PRT

<213> Homo sapiens

<400> 5404

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			20					25				30			
Ser	Pro	Ala	Leu	Thr	Met	Ala	Pro	Ser	Ser	Leu	Gly	Ala	Leu	Gly	Pro
			35				40					45			
Trp	Val	Gly	Ala	Leu	Glu	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Leu	Ser	Gln
	50					55				60					
Pro	Gly	Thr	His	Ala	Gly	Ala	Xaa	Asp	Pro	Arg	Pro	Ser	Leu	Arg	Lys
65				70				75					80		
Ala	Ser	Leu	Arg	Ala	Ala	Ser	Pro	Ala	Ala	Ser	Ser	Ser	Pro	Trp	Ala
			85					90					95		
Arg	Val	Pro	Cys	Ser	Arg	Ala	Arg	Arg	Pro	Lys	Ser	Ala	Glu	Leu	Leu
			100				105						110		
Arg	Ile	Pro	Gly	Thr	Ser	Thr	Arg	Pro	Lys	Lys	Glu	Arg	Gly	Cys	Pro
	115					120					125				
Ser	Pro	Gly	Leu	Pro	Ala	Ala	Gly	Pro	Gly	Pro	Ser	Pro	Ala	Gly	Arg
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Gly	Pro	Gly	Pro	Gln	Ala										
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<210> 5405

<211> 1609

<212> DNA

<213> Homo sapiens

<400> 5405

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420
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480
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660
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1260
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 <211> 291
 <212> PRT
 <213> Homo sapiens

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 Ala Gln Cys Leu Arg Asn Gly Gln Val Ile Glu Pro Asp Lys Asn Arg
 35 40 45
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
 50 55 60
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
 65 70 75 80
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
 85 90 95
 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
 100 105 110
 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
 115 120 125
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
 130 135 140
 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
 245 250 255
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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<210> 5407
 <211> 2010
 <212> DNA
 <213> Homo sapiens

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<210> 5408

<211> 335

<212> PRT

<213> Homo sapiens

<400> 5408

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	20						25						30		
Lys	Glu	Met	Val	Leu	Ser	Glu	Lys	Val	Ser	Gln	Leu	Met	Glu	Trp	Thr
	35					40					45				
Asn	Lys	Arg	Pro	Val	Ile	Arg	Met	Asn	Gly	Asp	Lys	Phe	Arg	Arg	Leu
	50				55					60					
Val	Lys	Ala	Pro	Pro	Arg	Asn	Tyr	Ser	Val	Ile	Val	Met	Phe	Thr	Ala
65					70				75					80	
Leu	Gln	Leu	His	Arg	Gln	Cys	Val	Val	Cys	Lys	Gln	Ala	Asp	Glu	Glu
			85						90					95	
Phe	Gln	Ile	Leu	Ala	Asn	Ser	Trp	Arg	Tyr	Ser	Ser	Ala	Phe	Thr	Asn
	100							105					110		
Arg	Ile	Phe	Phe	Ala	Met	Val	Asp	Phe	Asp	Glu	Gly	Ser	Asp	Val	Phe
	115					120						125			
Gln	Met	Leu	Asn	Met	Asn	Ser	Ala	Pro	Thr	Phe	Ile	Asn	Phe	Pro	Ala
	130					135						140			
Lys	Gly	Lys	Pro	Lys	Arg	Gly	Asp	Thr	Tyr	Glu	Leu	Gln	Val	Arg	Gly
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Phe	Ser	Ala	Glu	Gln	Ile	Ala	Arg	Trp	Ile	Ala	Asp	Arg	Thr	Asp	Val
			165					170						175	
Asn	Ile	Arg	Val	Ile	Arg	Pro	Pro	Asn	Tyr	Ala	Gly	Pro	Leu	Met	Leu
	180							185					190		
Gly	Leu	Leu	Leu	Ala	Val	Ile	Gly	Gly	Leu	Val	Tyr	Leu	Arg	Arg	Ser
	195						200					205			
Asn	Met	Glu	Phe	Leu	Phe	Asn	Lys	Thr	Gly	Trp	Ala	Phe	Ala	Ala	Leu
	210						215					220			
Cys	Phe	Val	Leu	Ala	Met	Thr	Ser	Gly	Gln	Met	Trp	Asn	His	Ile	Arg
225					230					235				240	
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			245						250					255	
Ile	His	Gly	Ser	Ser	Gln	Ala	Gln	Phe	Val	Ala	Glu	Thr	His	Ile	Val
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Ala	Ala Thr Ser Asp Met Asp Ile Gly Lys Arg Lys Ile Met Cys Val				
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Ala	Gly Ile Gly Leu Val Val Leu Phe Phe Ser Trp Met Leu Ser Ile				
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<210> 5409

<211> 2019

<212> DNA

<213> Homo sapiens

<400> 5409

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<210> 5410

<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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			20					25					30		
Gln	Ile	Glu	Gln	Gly	Met	Asp	Met	Val	Ile	Ser	Ser	Val	Ile	Gly	Glu
		35					40					45			
Ser	Tyr	Arg	Leu	Gln	Ser	Met	Gln	Cys	Ser	Ser	Leu	Phe	Gln	Phe	Asp
	50					55					60				
Phe	Gln	Glu	Ala	Val	Lys	Asn	Phe	Phe	Pro	Pro	Gly	Asn	Glu	Val	Val
65					70				75					80	
Asn	Gly	Glu	Asn	Leu	Ser	Phe	Ala	Tyr	Glu	Phe	Lys	Ala	Asp	Ala	Leu
			85					90					95		
Phe	Asp	Phe	Phe	Tyr	Trp	Phe	Gly	Leu	Ser	Asn	Ser	Val	Val	Lys	Val
			100				105					110			
Asn	Gly	Lys	Val	Leu	Asn	Leu	Ser	Thr	Ser	Pro	Glu	Lys	Lys	Glu	
		115				120					125				
Thr	Ile	Lys	Leu	Phe	Leu	Glu	Lys	Met	Ser	Glu	Pro	Leu	Ile	Arg	Arg
130					135						140				
Ser	Ser	Phe	Ser	Asp	Arg	Lys	Phe	Ser	Val	Thr	Ser	Arg	Gly	Ser	Ile

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Asp	Asp	Val	Phe	Asn	Cys	Asn	Leu	Ser	Pro	Arg	Ser	Ser	Leu	Thr	Glu
		165				170							175		
Pro	Leu	Leu	Ala	Glu	Leu	Pro	Phe	Pro	Ser	Val	Leu	Glu	Ser	Glu	Glu
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<210> 5411

<211> 2802

<212> DNA

<213> Homo sapiens

<400> 5411

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540
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<211> 642

<212> PRT

<213> Homo sapiens

<400> 5412

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<211> 1677

<212> DNA

<213> Homo sapiens

<400> 5413

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<212> PRT

<213> Homo sapiens

<400> 5414

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<211> 1493

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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<211> 528

<212> PRT

<213> Homo sapiens

<400> 5418

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4602

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 <212> PRT
 <213> Homo sapiens

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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr
			35				40					45		Cys
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser
			50				55				60			Met
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr
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Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro
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Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu
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Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe
			115				120					125		Leu
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe
			130				135				140			Ser
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg
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Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu
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Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile
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Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val
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Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu
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<211> 2427
<212> DNA
<213> Homo sapiens

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<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35					40					45			
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
		50				55						60			
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

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Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val Lys
				85					90					95
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp Ala
			100					105					110	
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys Ile
		115				120					125			
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg Pro
	130				135						140			
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala Leu
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Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu Val
			165				170						175	
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp Trp
		180					185					190		
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp Asn
	195				200						205			
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu Leu
	210				215						220			
Arg	Asp	Asn	Val	Asp	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
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Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln Met
			245				250						255	
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His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly Ala
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Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu Lys
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	340						345					350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr Glu
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Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln Thr
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Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln Glu
			405				410						415	
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp Tyr
	420						425					430		
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln Lys
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Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln Ser
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Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val Asn
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Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu Asp
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 <212> DNA
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<210> 5428
 <211> 101
 <212> PRT
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 Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
 35 40 45
 Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
 50 55 60
 Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
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<210> 5429
 <211> 612
 <212> DNA
 <213> Homo sapiens

<400> 5429

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<211> 94

<212> PRT

<213> Homo sapiens

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		20					25					30			
His	Glu	Glu	Glu	Val	Arg	Val	Pro	Ala	Leu	Ser	Trp	Gly	Arg	Pro	Arg
		35				40					45				
Ala	Pro	Ala	Pro	Ala	Ser	Lys	Pro	Arg	Pro	Arg	Leu	Asp	Leu	Asn	Cys
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Leu	Trp	Leu	Arg	Pro	Gln	Pro	Ile	Phe	Leu	Trp	Lys	Leu	Arg	Pro	Arg
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<211> 3005

<212> DNA

<213> Homo sapiens

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<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

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				20				25					30		
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

4614

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Gly Gly Thr	Pro Pro Ala Ser	Gln Ser Pro Phe	His Arg Ser Leu Ser			
	500		505		510	
Leu Glu Val	Gly Gly Glu Pro	Leu Gly Thr Ser	Gly Ser Gly Pro Pro			
	515		520		525	
Pro Asn Ser	Leu Ala His Pro	Gly Ala Trp Val	Pro Gly Pro Pro Pro			
	530		535		540	
Tyr Leu Pro	Arg Gln Gln Ser	Asp Gly Ser Leu	Leu Arg Ser Gln Arg			
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Pro Met Gly	Thr Ser Arg Arg	Gly Leu Arg Gly	Pro Ala Gln Val Ser			
	565		570		575	
Ala Gln Leu	Arg Ala Gly Gly	Gly Gly Arg Asp	Ala Pro Glu Ala Ala			
	580		585		590	
Ala Gln Ser	Pro Cys Ser Val	Pro Ser Gln Val	Pro Thr Pro Gly Phe			
	595		600		605	
Phe Ser Pro	Ala Pro Arg Glu	Cys Leu Pro Pro	Phe Leu Gly Val Pro			
	610		615		620	
Lys Pro Gly	Leu Tyr Pro Leu	Gly Pro Pro Ser	Phe Gln Pro Ser Ser			
625		630		635		640
Pro Ala Pro	Val Trp Arg Ser	Ser Ser Leu Gly	Pro Pro Ala Pro Leu Asp			
	645		650		655	
Arg Gly Glu	Asn Leu Tyr Tyr	Glu Ile Gly Ala	Ser Glu Gly Ser Pro			
	660		665		670	
Tyr Ser Gly	Pro Thr Arg Ser	Trp Ser Pro Phe	Arg Ser Met Pro Pro			
	675		680		685	
Asp Arg Leu	Asn Ala Ser Tyr	Gly Met Leu Gly	Gln Ser Pro Pro Leu			
	690		695		700	
His Arg Ser	Pro Asp Phe Leu	Leu Ser Tyr Pro	Pro Ala Pro Ser Cys			
705		710		715		720
Phe Pro Pro	Asp His Leu Gly	Tyr Ser Ala Pro	Gln His Pro Ala Arg			
	725		730		735	
Arg Pro Thr	Pro Pro Glu Pro	Leu Tyr Val Asn	Leu Ala Leu Gly Pro			
	740		745		750	
Arg Gly Pro	Ser Pro Ala Ser	Ser Ser Ser Ser	Pro Pro Ala His			
	755		760		765	
Pro Arg Ser	Arg Ser Asp Pro	Gly Pro Pro Val	Pro Arg Leu Pro Gln			
	770		775		780	
Lys Gln Arg	Ala Pro Trp Gly	Pro Arg Thr Pro	His Arg Val Pro Gly			
785		790		795		800
Pro Trp Gly	Pro Pro Glu Pro	Leu Leu Leu Tyr	Arg Ala Ala Pro Pro			
	805		810		815	
Ala Tyr Gly	Arg Gly Gly Glu	Leu His Arg Gly	Ser Leu Tyr Arg Asn			
	820		825		830	
Gly Gly Gln	Arg Gly Glu Gly	Ala Gly Pro Pro	Pro Pro Tyr Pro Thr			
	835		840		845	
Pro Ser Trp	Ser Leu His Ser	Glu Gly Gln Thr	Arg Ser Tyr Cys			
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<210> 5433

<211> 385

<212> DNA

<213> Homo sapiens

<400> 5433

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<210> 5434

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5434

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		20					25					30			
Asn	Ile	Pro	Ala	Ala	Met	Thr	His	Leu	Gly	Ile	Arg	Ser	Ser	Ser	Gly
	35					40					45				
Leu	Gln	Ser	Ser	Arg	Ser	Asn	Pro	Ser	Ile	Gln	Ala	Thr	Leu	Asn	Lys
	50				55					60					
Thr	Val	Leu	Ser	Ser	Ser	Leu	Asn	Asn	His	Pro	Gln	Thr	Ser	Val	Pro
65				70					75					80	
Asn	Ala	Ser	Ala	Leu	His	Pro	Ser	Leu	Arg	Leu	Phe	Ser	Leu	Ser	Asn
			85					90					95		
Pro	Ser	Leu	Ser	Thr	Thr	Asn	Leu	Ser	Gly	Pro	Ser	Arg	Arg	Arg	Gln
		100					105					110			
Pro	Pro	Val	Ser	Pro	Leu	Thr	Leu	Ser	Pro	Gly	Pro	Glu	Ala	His	Gln
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<210> 5435

<211> 617

<212> DNA

<213> Homo sapiens

<400> 5435

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120
ccttgataa gtatactttg tataacttct ggcaaaccat aattatgaac tcacattact
180
atagtactat aatactgcag aaagggatct tgcgtttcag aaatgtcact catccagttt
240

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 360
 cgacatgac tgatatgggt gttcttcatt ttgggctgta gtattttaaa gtagagggtt
 420
 gctctgatgg tcccatcact gcttgccatt gtctttccct ttgctctagc tatcagggga
 480
 tggtgcttta agtttggtcc ccaggcttta ctgccaagag ggaaattcat acccacttta
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 617

<210> 5436

<211> 119

<212> PRT

<213> Homo sapiens

<400> 5436

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His	Pro	Leu	Ile	Ala	Arg	Ala	Lys	Gly	Lys	Thr	Met	Ala	Ser	Ser	Asp
		20					25					30			
Gly	Thr	Ile	Arg	Ala	Asn	Leu	Tyr	Phe	Lys	Ile	Leu	Gln	Pro	Lys	Met
	35					40					45				
Lys	Asn	Asn	His	Ile	Arg	Ser	Cys	Arg	Ala	Val	Leu	His	Arg	Ser	Asp
	50				55					60					
Leu	Leu	Val	Arg	Lys	Leu	Leu	Ala	Leu	Cys	Lys	Glu	Lys	Glu	Asp	Cys
65				70					75					80	
Asn	Arg	Asn	His	Glu	Pro	Gly	Arg	Glu	Met	Gly	Leu	Glu	Lys	Gly	Glu
			85					90					95		
Glu	Asn	Trp	Met	Ser	Asp	Ile	Ser	Glu	Thr	Gln	Asp	Pro	Phe	Leu	Gln
			100					105					110		
Tyr	Tyr	Ser	Thr	Ile	Val	Met									
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<210> 5437

<211> 1422

<212> DNA

<213> Homo sapiens

<400> 5437

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 180
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 240
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 300

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 360
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 420
 gaacgttaca cctctgcagt ttccatgggc aaacctcaca tgggtcaaggc tgtttgtact
 480
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<210> 5438

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5438

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 35 40 45
 Ser Leu Leu Leu Pro Arg Ala Ala Gln Ile Leu Ala Ala Glu Ala Gly
 50 55 60
 Leu Pro Ser Ser Arg Ser Phe Met Gly Phe Ala Ala Pro Phe Thr Asn

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Lys	Arg	Lys	Ala	Tyr	Ser	Glu	Arg	Arg	Ile	Met	Gly	Tyr	Ser	Met	Gln
			85						90					95	
Glu	Met	Tyr	Glu	Val	Val	Ser	Asn	Val	Gln	Glu	Tyr	Arg	Glu	Phe	Val
			100						105					110	
Pro	Trp	Cys	Lys	Lys	Ser	Leu	Val	Val	Ser	Ser	Arg	Lys	Gly	His	Leu
			115				120						125		
Lys	Ala	Gln	Leu	Glu	Val	Gly	Phe	Pro	Pro	Val	Met	Glu	Arg	Tyr	Thr
	130						135				140				
Ser	Ala	Val	Ser	Met	Val	Lys	Pro	His	Met	Val	Lys	Ala	Val	Cys	Thr
145						150				155				160	
Asp	Gly	Lys	Leu	Phe	Asn	His	Leu	Glu	Thr	Ile	Trp	Arg	Phe	Ser	Pro
				165					170					175	
Gly	Ile	Pro	Ala	Tyr	Pro	Arg	Thr	Cys	Thr	Val	Asp	Phe	Ser	Ile	Ser
			180					185					190		
Phe	Glu	Phe	Arg	Ser	Leu	Leu	His	Ser	Gln	Leu	Ala	Thr	Met	Phe	Phe
		195					200					205			
Asp	Glu	Val	Val	Lys	Gln	Asn	Val	Ala	Ala	Phe	Glu	Arg	Arg	Ala	Ala
	210					215					220				
Thr	Lys	Phe	Gly	Pro	Glu	Thr	Ala	Ile	Pro	Arg	Glu	Leu	Met	Phe	His
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<210> 5439

<211> 4234

<212> DNA

<213> Homo sapiens

<400> 5439

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120

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180

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240

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420

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540

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<211> 461

<212> PRT

<213> Homo sapiens

<400> 5440

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Gln	Arg	Met	Leu	Asn	Arg	Arg	Pro	Glu	Ile	Val	Val	Ala	Thr	Pro	Gly
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	50					55				60					
Arg	Gln	Leu	Arg	Cys	Leu	Val	Val	Asp	Glu	Ala	Asp	Arg	Met	Val	Glu
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Lys	Gly	His	Phe	Ala	Glu	Leu	Ser	Gln	Leu	Leu	Glu	Met	Leu	Asn	Asp
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Ser	Gln	Tyr	Asn	Pro	Lys	Arg	Gln	Thr	Leu	Val	Phe	Ser	Ala	Thr	Leu
			100					105					110		
Thr	Leu	Val	His	Gln	Ala	Pro	Ala	Arg	Ile	Leu	His	Lys	Lys	His	Thr
			115					120					125		
Lys	Lys	Met	Asp	Lys	Thr	Ala	Lys	Leu	Asp	Leu	Leu	Met	Gln	Lys	Ile
			130				135					140			
Gly	Met	Arg	Gly	Lys	Pro	Lys	Val	Ile	Asp	Leu	Thr	Arg	Asn	Glu	Ala
145					150				155					160	
Thr	Val	Glu	Thr	Leu	Thr	Glu	Thr	Lys	Ile	His	Cys	Glu	Thr	Asp	Glu
			165					170						175	
Lys	Asp	Phe	Tyr	Leu	Tyr	Tyr	Phe	Leu	Met	Gln	Tyr	Pro	Gly	Arg	Ser
			180					185					190		
Leu	Val	Phe	Ala	Asn	Ser	Ile	Ser	Cys	Ile	Lys	Arg	Leu	Ser	Gly	Leu
			195				200						205		
Leu	Lys	Val	Leu	Asp	Ile	Met	Pro	Leu	Thr	Leu	His	Ala	Cys	Met	His
			210				215					220			
Gln	Lys	Gln	Arg	Leu	Arg	Asn	Leu	Glu	Gln	Phe	Ala	Arg	Leu	Glu	Asp
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Cys	Val	Leu	Leu	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro
			245						250					255	
Lys	Val	Gln	His	Val	Ile	His	Tyr	Gln	Val	Pro	Arg	Thr	Ser	Glu	Ile
			260					265					270		
Tyr	Val	His	Arg	Ser	Gly	Arg	Thr	Ala	Arg	Ala	Thr	Asn	Glu	Gly	Leu
			275				280						285		
Ser	Leu	Met	Leu	Ile	Gly	Pro	Glu	Asp	Val	Ile	Asn	Phe	Lys	Lys	Ile

290	295	300
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305	310	315
Thr Lys Tyr Met Asp Val Val Lys Glu Arg Ile Arg Leu Ala Arg Gln		
	325	330
Ile Glu Lys Ser Glu Tyr Arg Asn Phe Gln Ala Cys Leu His Asn Ser		
	340	345
Trp Ile Glu Gln Ala Ala Ala Ala Leu Glu Ile Glu Leu Glu Glu Asp		
	355	360
Met Tyr Lys Gly Gly Lys Ala Asp Gln Gln Glu Glu Arg Arg Arg Gln		
	370	375
Lys Gln Met Lys Val Leu Lys Lys Glu Leu Arg His Leu Leu Ser Gln		
385	390	395
Pro Leu Phe Thr Glu Ser Gln Lys Thr Lys Tyr Pro Thr Gln Ser Gly		
	405	410
Lys Pro Pro Leu Leu Val Ser Ala Pro Ser Lys Ser Glu Ser Ala Leu		
	420	425
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<210> 5441

<211> 1635

<212> DNA

<213> Homo sapiens

<400> 5441

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<210> 5442

<211> 250

<212> PRT

<213> Homo sapiens

<400> 5442

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		20						25					30		
Lys	Asn	Lys	Val	Val	Gly	Trp	Arg	Ser	Gly	Val	Glu	Lys	Asp	Leu	Asp
	35						40					45			
Glu	Val	Leu	Gln	Thr	His	Ser	Val	Phe	Val	Asn	Val	Ser	Lys	Gly	Gln
	50				55						60				
Val	Ala	Lys	Lys	Glu	Asp	Leu	Ile	Ser	Ala	Phe	Gly	Thr	Asp	Asp	Gln
65				70						75				80	
Thr	Glu	Ile	Cys	Lys	Gln	Ile	Leu	Thr	Lys	Gly	Glu	Val	Gln	Val	Ser
			85					90					95		
Asp	Lys	Glu	Arg	His	Thr	Gln	Leu	Glu	Gln	Met	Phe	Arg	Asp	Ile	Ala
		100					105						110		
Thr	Ile	Val	Ala	Asp	Lys	Cys	Val	Asn	Pro	Glu	Thr	Lys	Arg	Pro	Tyr
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Thr	Val	Ile	Leu	Ile	Glu	Arg	Ala	Met	Lys	Asp	Ile	His	Tyr	Ser	Val

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	165	170
Ile Leu Pro Val Asn Glu Gly Lys Lys Leu Lys Glu Lys Leu Lys Pro		175
	180	185
Leu Ile Lys Val Ile Glu Ser Glu Asp Tyr Gly Gln Gln Leu Glu Ile		190
	195	200
Val Cys Lys Ile Asp Pro Gly Cys Phe Arg Glu Ile Asp Glu Leu Ile		205
	210	215
Lys Lys Glu Thr Lys Gly Lys Gly Ser Leu Glu Val Leu Asn Leu Lys		220
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<210> 5443

<211> 2021

<212> DNA

<213> Homo sapiens

<400> 5443

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<210> 5444

<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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	20						25					30			
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
	35					40					45				
Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
	50				55				60						
Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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<210> 5445
<211> 1187
<212> DNA
<213> Homo sapiens
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<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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 Arg Lys Thr Gly Trp Arg Phe Leu Arg Arg Ser Thr His Ser Arg His
 35 40 45
 Gly Thr Gln Trp Phe His Pro Gln Val Cys Ser Asn Arg His His Ser
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 Pro Arg Pro His Ala Asp Ser Asp Thr Arg Ala His Ser Pro Arg Ser

65		70		75		80										
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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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<210> 5448

<211> 189

<212> PRT

<213> Homo sapiens

<400> 5448

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 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
 50 55 60
 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
 65 70 75 80
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu
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 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
 115 120 125
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg
 130 135 140
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg
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<210> 5449

<211> 1359

<212> DNA

<213> Homo sapiens

<400> 5449

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<210> 5450

<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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		20					25					30			
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
		35				40					45				
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				85						90				95
Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr	Arg	Phe	Leu	Gln	Thr	Ala	Glu
			100					105					110	Met
Val	Lys	Pro	Ser	Thr	Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser
		115					120					125		
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		180						185				190		
Asp	Phe	Leu	Asp	Ser	Glu	Val	Asn	Leu	Phe	Leu	Val	Pro	Phe	Met
		195					200					205		Asp
Ser	Glu	Ala	Glu	Ser	Glu	Asn	Pro	Pro	Arg	Ala	Gly	Pro	Gly	Ser
	210					215					220			Ser
Pro	Leu	Phe	Ser	Leu	Leu	Pro	Gly	Tyr	Arg	Gly	His	Pro	Ser	Phe
225					230					235				Gln
Ser	Leu	Val	Ser	Lys	Leu	Arg	Ser	Gln	Val	Met	Ser	Met	Ala	Arg
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Gln	Leu	Ser	His	Thr	Ile	Leu	Thr	Glu	Lys	Asn	Trp	Phe	His	Tyr
		260						265				270		Ala
Ala	Arg	Ile	Trp	Asp	Gly	Val	Arg	Lys	Ser	Ser	Ala	Leu	Ala	Glu
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<210> 5451

<211> 1184

<212> DNA

<213> Homo sapiens

<400> 5451

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<210> 5452

<211> 206

<212> PRT

<213> Homo sapiens

<400> 5452

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			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
		35					40					45			
Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
	50					55					60				
Ala	Pro	Gly	Met	Val	Thr	Glu	Glu	Lys	His	Ala	Val	Pro	Val	Ser	Pro
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Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90					95		
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
		100					105						110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
	115					120					125				
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
	130					135					140				
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
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			165					170					175		
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
		180					185						190		
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195

200

205

<210> 5453

<211> 1974

<212> DNA

<213> Homo sapiens

<400> 5453

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 1974

<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

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			20					25					30		
Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
	35					40					45				
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
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Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
65				70					75					80	
Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
			85					90					95		
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			100					105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
	115					120						125			
Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala
130					135						140				
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
145				150						155				160	
His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro
			165					170						175	
Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
		180						185					190		
His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
	195					200						205			
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210		215		220	
Thr Asp Thr Glu Cys Val Glu Val Cys Thr Pro Asp Pro Phe Leu Pro					
225		230		235	240
Ser Leu Asp Ala Cys Trp Ser Pro His Thr Leu Leu Gln Ser Leu Asp					
	245		250		255
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp					
	260		265		270
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly					
	275		280		285
Arg Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg					
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Gly Pro Cys Leu Gln Trp Leu Ser Glu Trp Thr Leu Glu Pro Asp Ser					
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<210> 5455

<211> 975

<212> DNA

<213> Homo sapiens

<400> 5455

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240
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<210> 5456
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 <213> Homo sapiens

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 35 40 45
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr
 50 55 60
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
 65 70 75 80
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
 85 90 95
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
 100 105 110
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
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<210> 5457
 <211> 448
 <212> DNA
 <213> Homo sapiens

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<210> 5458
 <211> 81
 <212> PRT

<213> Homo sapiens

<400> 5458

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      20           25           30
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      35           40           45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50           55           60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65           70           75           80
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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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960

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<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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		20					25					30			
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
		35				40						45			
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
		50				55					60				
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
		65			70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
		100					105					110			
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
		115				120					125				
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
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<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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<210> 5462

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5462

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			20					25					30		
Leu	Gly	Ile	Cys	Tyr	Asp	Met	Arg	Phe	Ala	Glu	Leu	Ala	Gln	Ile	Tyr
		35					40					45			
Ala	Gln	Arg	Gly	Cys	Gln	Leu	Leu	Val	Tyr	Pro	Gly	Ala	Phe	Asn	Leu
	50					55					60				
Thr	Thr	Gly	Pro	Ala	His	Trp	Glu	Leu	Leu	Gln	Arg	Ser	Arg	Ala	Val
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Asp	Asn	Gln	Val	Tyr	Val	Ala	Thr	Ala	Ser	Pro	Ala	Arg	Asp	Asp	Lys
			85						90				95		
Ala	Ser	Tyr	Val	Ala	Trp	Gly	His	Ser	Thr	Val	Val	Asn	Pro	Trp	Gly
			100					105					110		
Glu	Val	Leu	Ala	Lys	Ala	Gly	Thr	Glu	Glu	Ala	Ile	Val	Tyr	Ser	Asp
		115					120					125			
Ile	Asp	Leu	Lys	Lys	Leu	Ala	Glu	Ile	Arg	Gln	Gln	Ile	Pro	Val	Phe
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<210> 5463

<211> 792

<212> DNA

<213> Homo sapiens

<400> 5463

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 780
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 792

<210> 5464

<211> 111

<212> PRT

<213> Homo sapiens

<400> 5464

Phe	Ser	Gly	Val	Cys	Phe	Ala	Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu
1				5				10					15		
Leu	His	Asp	Ala	Val	Met	Asn	Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu
		20					25					30			
Gln	Met	Tyr	Asn	Ser	Gln	His	Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr
	35					40					45				
Val	Trp	Arg	Thr	Glu	Gly	Leu	Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr
50					55					60					
Gln	Leu	Thr	Met	Asn	Ile	Pro	Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr
65				70					75				80		
Glu	Phe	Leu	Gln	Glu	Gln	Val	Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln
			85				90					95			
Ser	His	Ile	Ile	Ser	Gly	Gly	Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	
			100				105					110			

<210> 5465

<211> 497

<212> DNA

<213> Homo sapiens

<400> 5465

tttgacggtc ttcaggttta tttcttaaat caattaggaa ataaaaccac agtgcccagg
 60
 aaagttcaca tgagacgcca cgggtgtctt tgccatggcc ccaccactcc agggggccagg
 120
 ggggtgctgct ggagggagga cagacggaca ggccgctctg gtggccggcc ccagaaaggc
 180
 tggcgtggat gttcgagatg agccaccagc gaagccagta gggatgtctg ggccgtcctg
 240
 gtgggattgt ctgggacatc gccaccaaca cgggtgcaga gccatcagtg gggacatcgg
 300
 agggggccacc accaggtggg gtatattcaa caggctagaa ccctgaggc ttgagaggcc
 360
 aacccccggc aggagacctc cctgacccc tctgtgcct ctctgtggg accctccagt
 420
 agacacacca gatgaggaca cccaggaggc ctctcccag gacaggaggc agctgcctgg
 480

gcagccacgc agtgcac

497

<210> 5466

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5466

Met Ala Pro Pro Leu Gln Gly Pro Gly Gly Ala Ala Gly Gly Arg Thr
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 Asp Gly Gln Ala Trp Val Ala Gly Pro Arg Lys Ala Gly Val Asp
 20 25 30
 Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
 35 40 45
 Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
 50 55 60
 Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
 65 70 75 80
 Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
 85 90 95
 Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
 100 105 110
 Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
 115 120 125
 Gly Gln Pro Arg Ser Ala
 130

<210> 5467

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 5467

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 tcccggggagc cggtctgcgat ggacgcgcgc ttggaaccct tcccggccga caggctgttc
 120
 cccggatcca gcttcttgga cttgggggat ctgaacgagt cggacttcct caacaatgcg
 180
 cactttctcg agcacctgga ccactttacg gagaacatgg aggacttctc caatgacctg
 240
 ttccagcagct tctttgatga cctgtgctg gatgagaaga gccctctatt ggacatggaa
 300
 ctggactccc ctacgccagg catccaggcg gagcacagct actccctgag cggcgactca
 360
 gcgccccaga gcccccttgt gcccatcaag atggaggaca ccaccaaga tgcagagcat
 420
 ggagcatggg cgctgggaca caaactgtgc tccatcatgg tgaagcagga gcagagcccc
 480
 gagctgcccg tggacctctt ggctgcccc tcggccatgg ctgccgcggc cgccatggcc
 540
 accaccccgc tgctgggctt cagcccttg tccaggctgc ccatccccc ccaggcccc
 600

ggagagatga ctcagctgcc agtgatcaaa gcagagcctc tggagggtgaa ccagttcctc
 660
 aaagtgcacac cggaggacct ggtgcagatg cctccgacgc cccccagcag ccatggcagt
 720
 gacagcgacg gctcccagag tccccgctct ctgccccctt ccagccctgt caggcccatg
 780
 gcgcgctcct ccacggccat ctccagctcc ccaactctca cggctcctca taaattacag
 840
 gggacatcag gccctctggt cctgacagag gaggagaaga ggaccctgat tgctgagggc
 900
 tatcccatcc ccaccaaact cccctcacc aaatcagagg agaaggcctt gaagaaaatt
 960
 cggaggaaga tcaagaataa gatttctgct caggaaagta ggagaaagaa gaaagaatac
 1020
 atggacagcc tggagaaaaa agtggagtct tgttcaactg agaacttgga gcttcggaag
 1080
 aaggtagaga ccctggagaa tgccaacagc ttctccagcg ggatccagcc actcctctgt
 1140
 tccctgattg gcctggagaa tcccacctga cccccaccc caccctctg tctctggctg
 1200
 gggttccttt ctggcccaaa gtaggtccaa gccctttag ttatttcgcc acctgctgta
 1260
 cattgtggga actgcaaccc ctacgtgccc gtttgggtgg agagagatta aacatttgcc
 1320
 caccaaaaa
 1329

<210> 5468

<211> 363

<212> PRT

<213> Homo sapiens

<400> 5468

Met	Asp	Ala	Val	Leu	Glu	Pro	Phe	Pro	Ala	Asp	Arg	Leu	Phe	Pro	Gly
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Ser	Ser	Phe	Leu	Asp	Leu	Gly	Asp	Leu	Asn	Glu	Ser	Asp	Phe	Leu	Asn
		20					25					30			
Asn	Ala	His	Phe	Pro	Glu	His	Leu	Asp	His	Phe	Thr	Glu	Asn	Met	Glu
		35				40						45			
Asp	Phe	Ser	Asn	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Asp	Asp	Pro	Val	Leu
	50					55					60				
Asp	Glu	Lys	Ser	Pro	Leu	Leu	Asp	Met	Glu	Leu	Asp	Ser	Pro	Thr	Pro
	65				70					75				80	
Gly	Ile	Gln	Ala	Glu	His	Ser	Tyr	Ser	Leu	Ser	Gly	Asp	Ser	Ala	Pro
		85						90					95		
Gln	Ser	Pro	Leu	Val	Pro	Ile	Lys	Met	Glu	Asp	Thr	Thr	Gln	Asp	Ala
		100						105					110		
Glu	His	Gly	Ala	Trp	Ala	Leu	Gly	His	Lys	Leu	Cys	Ser	Ile	Met	Val
	115						120				125				
Lys	Gln	Glu	Gln	Ser	Pro	Glu	Leu	Pro	Val	Asp	Pro	Leu	Ala	Ala	Pro
	130					135					140				
Ser	Ala	Met	Ala	Ala	Ala	Ala	Ala	Met	Ala	Thr	Thr	Pro	Leu	Leu	Gly
	145				150					155				160	
Leu	Ser	Pro	Leu	Ser	Arg	Leu	Pro	Ile	Pro	His	Gln	Ala	Pro	Gly	Glu

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<210> 5469
<211> 1292
<212> DNA
<213> Homo sapiens
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<400> 5469
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60
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120
acggagttta cccaggtggt gcagcatgac acggcctgta ccatcgagc cacggccagc
180
gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa
240
gggttatctg acttcctagg ggtgatctca gacaccttg ccccttcgcc agacaaaacc
300
atcgactgcg atgtcatcac cctgatgggc acaccgtctg gcacagctga gccctatgat
360
ggcaccaagg ctgcctcta tagcctgcag tcggaccag caacctactg taatgaacca
420
gatgggcccc cggaattggt tgacgcctgg ctttcccagt tctgcttggg ggagaagaag
480
ggggagatct cagagctcct tgtaggcagc cctccatcc gggccctcta caccaagatg
540
gttcacgagc ctgtttccca ttcagaattc tggcatcggg atttctataa agtccatcag
600
ttagagcagg agcaggcccc gagggacgcc ctgaagcagc gggcggaaca gagcatctct
660

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gaagagcccc gctgggagga ggaggaagag gagctcatgg gcatttcacc catatctcca
 720
 aaagaggcaa aggttcctgt ggccaaaatt tctacattcc ctgaaggaga acctggcccc
 780
 cagagcccc gtgaagagaa tctggtgact tcagttgagc cccagcaga ggtgactcca
 840
 tcagagagca gtgagagcat ctccctcgtg acacagatcg ccaacccggc cactgcacct
 900
 gaggcacgag tgctacccaa ggacctgtcc caaaagctgc tagaggcatc cttggaggaa
 960
 cagggcctgg ctgtggatgt gggtgagact ggacctcac cccctattca ctccaagccc
 1020
 ctaacgcctg ctggccacac cggcgcccca gagcccaggc ctccagccag agtagagact
 1080
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 1140
 tctacaccct ccaacaatgg aaagaaaggc tcaagcacgg acatcagtga ggactgggag
 1200
 aaagactttg acttgacat gactgaagag gaggtgcaga tggcactttc caaagtggat
 1260
 gcctccgggg agctgaagat gtagaggggg aa
 1292

<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
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Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
		20						25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40					45				
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50				55				60						
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70				75						80	
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
		85						90					95		
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
		100					105						110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
	115					120						125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
	130				135					140					
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150					155					160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
		165					170						175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
		180					185					190			
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

195 200 205
 Asp Ala Leu Lys Gln Arg Ala Glu Gln Ser Ile Ser Glu Glu Pro Gly
 210 215 220
 Trp Glu Glu Glu Glu Glu Glu Leu Met Gly Ile Ser Pro Ile Ser Pro
 225 230 235 240
 Lys Glu Ala Lys Val Pro Val Ala Lys Ile Ser Thr Phe Pro Glu Gly
 245 250 255
 Glu Pro Gly Pro Gln Ser Pro Cys Glu Glu Asn Leu Val Thr Ser Val
 260 265 270
 Glu Pro Pro Ala Glu Val Thr Pro Ser Glu Ser Ser Glu Ser Ile Ser
 275 280 285
 Leu Val Thr Gln Ile Ala Asn Pro Ala Thr Ala Pro Glu Ala Arg Val
 290 295 300
 Leu Pro Lys Asp Leu Ser Gln Lys Leu Leu Glu Ala Ser Leu Glu Glu
 305 310 315 320
 Gln Gly Leu Ala Val Asp Val Gly Glu Thr Gly Pro Ser Pro Pro Ile
 325 330 335
 His Ser Lys Pro Leu Thr Pro Ala Gly His Thr Gly Gly Pro Glu Pro
 340 345 350
 Arg Pro Pro Ala Arg Val Glu Thr Leu Arg Glu Glu Ala Pro Thr Asp
 355 360 365
 Leu Arg Val Phe Glu Leu Asn Ser Asp Ser Gly Lys Ser Thr Pro Ser
 370 375 380
 Asn Asn Gly Lys Lys Gly Ser Ser Thr Asp Ile Ser Glu Asp Trp Glu
 385 390 395 400
 Lys Asp Phe Asp Leu Asp Met Thr Glu Glu Glu Val Gln Met Ala Leu
 405 410 415
 Ser Lys Val Asp Ala Ser Gly Glu Leu Lys Met
 420 425

<210> 5471

<211> 534

<212> DNA

<213> Homo sapiens

<400> 5471

cggccgcccc gcgggggcgc agaaatagga ccgtcctggc agaggctgca gccgacccag
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 ctggccccac tacgcggggc ccagagccag ggtgggggat gcagagaccg ggcgtgcggg
 120
 ttgccagggtg tggcgacacat gtgtgcccggt gggcagagta cagagacaca agcttgtgtg
 180
 gacacgaatg tgtagctatg tgcgagtga cacggagtgg tgagtgcagg gacccaggc
 240
 cggcctgcgt cgggtgcgag ggcataatagg ggcgtgcacg cagtcttggg ggtgtgtgca
 300
 cagagccccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg
 360
 tgtgcaaccc aaggaggtgg gcgcttgga tccaaagtgt gcgcttatcc ggatgtggat
 420
 gtgggggcag ccggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gacccacaga
 480
 gcatatgtgt ccatgcctgg tgctgtgact catgtccctg ggggtggcac gcgt
 534

<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472

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Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys
 1           5           10           15
Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser
      20           25           30
Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
      35           40           45
Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
      50           55           60
Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
      65           70           75           80
Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
      85           90           95
Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
      100          105          110
Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
      115          120          125
Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
      130          135          140
Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
      145          150          155          160
Ala
  
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<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473

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cgctgccgcg ccccgcgccc ccaggaggcc gcacctgcg ccaggggccg gagacagcaa
120
catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc
180
aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcatg
240
gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt
300
actggccaag gaaagcagtc ggagcaacca tacaatttgg ttgggacact ttacaacatc
360
cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
420
gtgtggacat ctccatacac ttggtggact gatgcctgtt ttgcacactc gtcacttcca
480
gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc
540
  
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ttttgatcac gacctcttta gctttgcaga ttgatcttt gggaagtggc ctgtggttct
 600
 tatcaccaat cctaaatcac tcctttatag ttgtggtgaa catgaaccac tagaaagact
 660
 tcttcactca acccacatta gattggtaac a
 691

<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

Met	Lys	Lys	Met	Glu	Leu	Leu	Leu	Leu	Ala	Lys	Glu	Ser	Ser	Arg
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Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile
			20				25					30		Leu
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Tyr
		35				40					45			
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu
	50					55				60				His
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp
65					70				75				80	Lys
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe
			85					90					95	Ser
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr
		100					105					110		Asn
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu
		115					120					125		Arg
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr				
		130					135							

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 120
 aacaaccccc acgccagcta cagcgccctt ccgccagtga gctectccga cagcgaggcc
 180
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga ccggggggtc
 240
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac
 300
 tcagacaaga gtacgcgaaa cagtggcctg aagaggaaga cgcctgcgct aaagatgtcg
 360
 gtctcgaaac gagcccgaaa ggcctccagc gacctggatc aggccagcgt gtccccatcc
 420
 gaagaggaga actcggaaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca
 480

cctgagaaga aagcagcggg cggggcgcca cggagggggc ctctgggggg acggaaaaaa
 540
 aagaaggcgc cgtcagcctc cgactccgac tccaaggccg attcggacgg ggccaagcct
 600
 gagccggtgg ccatggcgcg gtcggcgt
 628

<210> 5476
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 5476
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr
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 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe
 20 25 30
 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser
 35 40 45
 Ala Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn
 50 55 60
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val
 65 70 75 80
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu
 85 90 95
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg
 100 105 110
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala
 115 120 125
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn
 130 135 140
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr
 145 150 155 160
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly
 165 170 175
 Gly Arg Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys
 180 185 190
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser
 195 200 205
 Ala

<210> 5477
 <211> 727
 <212> DNA
 <213> Homo sapiens

<400> 5477
 ttttttggtta gtgtttcctt tattataaag cactgaaata agttaataa acaggtggga
 60
 ggctgggcag tccccagcc gggttgcca cagcccctgg gggcagtgga ggtgaataca
 120
 gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caaggtcccc tgggccatat
 180

gggccccccc gcccatgggg ttgggctggt ccttatagtg cctacgttag tctgtgtgga
 240
 gcccttgccc agcgggggag aaaaagggtg cttctgtgcc gtctgtataa aacatggccc
 300
 ctcacctgtc ggccccccac acagctggca ggctgggctg gcctctcacc cctggcctcc
 360
 cctggacccc tggctggctc ctcaacttca ctctccgcac ttagtgcccg gccgccccca
 420
 gactcatcgt cgctcagccc atagggaagc ccaggcctgg ccccagaga gtctccttcc
 480
 gagtctctct cgaagcccat gagctggcca ctgttgccgt cgccttcctc ctcttctct
 540
 tctctctcaa actccagatc ctggcctagt agcaaatac tctccaatac cagggccccc
 600
 ggtccttcgt cgaggagtc ttcagtatcc actttgaccc cctcgcatth cacgggctgc
 660
 ggggtgcttt gcttccttcg gggcatcgtg accggctcca gcccgacgcg cctccggcct
 720
 gcggccg
 727

<210> 5478

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5478

Ser	Ala	Ser	Val	Lys	Ala	Arg	Ser	Pro	Gly	Pro	Tyr	Gly	Pro	Pro	Arg
1				5					10					15	
Pro	Trp	Gly	Trp	Ala	Gly	Pro	Tyr	Ser	Ala	Tyr	Val	Ser	Leu	Cys	Gly
		20						25					30		
Ala	Pro	Gly	Gln	Arg	Gly	Arg	Lys	Arg	Trp	Leu	Leu	Val	Arg	Leu	Tyr
		35					40					45			
Lys	Thr	Trp	Pro	Leu	Thr	Cys	Arg	Pro	Pro	Thr	Gln	Leu	Ala	Gly	Trp
	50					55				60					
Ala	Gly	Leu	Ser	Pro	Leu	Ala	Ser	Pro	Gly	Pro	Leu	Ala	Gly	Ser	Ser
65				70					75					80	
Thr	Ser	Leu	Ser	Ala	Leu	Ser	Ala	Arg	Pro	Pro	Pro	Asp	Ser	Ser	Ser
				85					90					95	
Leu	Ser	Pro													

<210> 5479

<211> 1386

<212> DNA

<213> Homo sapiens

<400> 5479

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 120
 atgcgagagg agcagctggc acgggaggcc gagggccggg cggagcggga ggaggaggcc
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag
 240
 cggtgcaga agcagaaaga ggaggccgaa gctcggtcgc gggaagaggc ggagcggcag
 300
 cgtctggagc gggaaaagca cttccagcag caggagcaag agcggcaaga gcgcagaaaag
 360
 cgtctggagg agatcatgaa gaggactcgg aagtcagaag tttctgaaac caagcagaag
 420
 caggacagca aggaggccaa cgccaacggt tccagcccag agcctgtgaa agctgtggag
 480
 gctcgggtccc cagggtcgca gaaggaggct gtgcagaaag aggagcccat cccacaggag
 540
 cctcagtga gtctcccaag caaggagtgg ccagcgtccc tggatgaatgg cctgcagcct
 600
 ctcccagcac accaggagaa tggcttctcc accaacggac cctctgggga caagagtctg
 660
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 720
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<210> 5480

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

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Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
		20					25					30			
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

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 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
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 85 90 95
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Glu
 100 105 110
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
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 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro
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 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala
 180 185 190
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
 195 200 205
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
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<210> 5481

<211> 1513

<212> DNA

<213> Homo sapiens

<400> 5481

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<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

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			20					25					30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp
		35					40					45			
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50				55					60					
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70				75				80		
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
			85					90					95		
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100				105					110			
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr


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Asn Tyr Glu Ser Ala Pro Pro Ser Pro Gln Tyr Lys Lys Ile Ile Cys
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Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val Ser Glu Glu Ile
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<210> 5483

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 5483

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240
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720
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1140

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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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			20					25					30		
Ile	Asp	Ile	Ile	Asn	Leu	Asp	Thr	Phe	Thr	Tyr	Ile	Glu	Ser	Ala	Ser
		35					40					45			
Glu	Leu	Arg	Gly	Gly	Phe	Asp	Trp	Ser	Leu	His	Phe	Gln	Trp	Glu	Gln
	50					55				60					
Leu	Ser	Pro	Glu	Gln	Lys	Ala	Arg	Arg	Leu	Asp	Pro	Thr	Glu	Pro	Ile
65					70				75					80	
Arg	Thr	Pro	Ile	Ile	Ala	Gly	Gly	Leu	Phe	Val	Ile	Asp	Lys	Ala	Trp
				85				90						95	
Phe	Asp	Tyr	Leu	Gly	Lys	Tyr	Asp	Met	Asp	Met	Asp	Ile	Trp	Gly	Gly
			100				105						110		
Glu	Asn	Phe	Glu	Ile	Ser	Phe	Arg	Val	Trp	Met	Cys	Gly	Gly	Ser	Leu
		115					120					125			
Glu	Ile	Val	Pro	Cys	Ser	Arg	Val	Gly	His	Val	Phe	Arg	Lys	Lys	His
		130				135					140				
Pro	Tyr	Val	Phe	Pro	Asp	Gly	Asn	Ala	Asn	Thr	Tyr	Ile	Lys	Asn	Thr
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Lys	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Glu	Tyr	Lys	Gln	Tyr	Tyr	Tyr
			165					170						175	
Ala	Ala	Arg	Pro	Phe	Ala	Leu	Glu	Arg	Pro	Phe	Gly	Asn	Val	Glu	Ser
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			245					250						255	
Val	Lys	Gly	Glu	Asp	Ala	Lys	Ser	Gln	Val	Trp	Ala	Phe	Thr	Tyr	Thr

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Gln Lys Ile	Leu Gln Glu Glu Leu Cys Leu Ser Val Ile Thr Leu Phe				
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Pro Gly Ala	Pro Val Val Leu Val Leu Cys Lys Asn Gly Asp Asp Arg				
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Gln Gln Trp Thr Lys Thr Gly Ser His Ile Glu His Ile Ala Ser His					
305		310		315	320
Leu Cys Leu Asp Thr Asp Met Phe Gly Asp Gly Thr Glu Asn Gly Lys					
	325		330		335
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<210> 5485

<211> 1549

<212> DNA

<213> Homo sapiens

<400> 5485

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1020

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<210> 5486

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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		35					40					45			
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		50				55					60				
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Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90					95		
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
		100						105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
		115				120						125			
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		130				135						140			
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
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<211> 1716
<212> DNA
<213> Homo sapiens
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1140

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<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
		35					40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
		50				55					60				
Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
65				70						75				80	
Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
			85					90					95		
Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105					110		
Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
		115					120					125			
Gly	Ala	Phe	Tyr	Arg	Ser	Tyr	Thr	Thr	Gln	Leu	Thr	Met	Asn	Ile	Pro
		130				135					140				
Phe	Gln	Ser	Ile	His	Phe	Ile	Thr	Tyr	Glu	Phe	Leu	Gln	Glu	Gln	Val
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			165					170					175		
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<212> DNA

<213> Homo sapiens

<400> 5489

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<212> PRT

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<211> 1278

<212> PRT

<213> Homo sapiens

<400> 5494

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Gln	Thr	Leu	Lys	Asp	Asn	Leu	Gln	Leu	Pro	Leu	Gln	Phe	Leu	Ser
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Cys	Pro	Ser	Cys	Phe	Tyr	Asn	Leu	Leu	Asn	Leu	Phe	Cys	Glu	Leu
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<211> 2414

<212> DNA

<213> Homo sapiens

<400> 5495

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<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

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Lys	Tyr	Cys	Leu	Pro	Leu	Thr	Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln
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<212> DNA

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<210> 5498
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<400> 5498
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 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
 50 55 60
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
 65 70 75 80
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
 85 90 95
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
 100 105 110
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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 Val Leu Leu Glu Pro Phe Val His Gln Val Gly Gly His Ser Cys Val

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Leu Arg Phe Asn Glu Thr Thr Leu Cys Lys Pro Leu Val Pro Arg Glu
      35      40      45
His Gln Phe Tyr Glu Thr Leu Pro Ala Glu Met Arg Lys Phe Thr Pro
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Gln Tyr Lys Gly Val Val Ser Val Arg Phe Glu Glu Asp Glu Asp Arg
      65      70      75      80
Asn Leu Cys Leu Ile Ala Tyr Pro Leu Lys Gly Asp His Gly Ile Val
      85      90      95
Asp Ile Ala His Asn Ser Asp Cys Glu Pro Lys Ser Lys Leu Leu Arg
      100      105      110
Trp Thr Thr Asn Lys Lys His His Val Leu Glu Thr Glu Lys Thr Pro
      115      120      125
Lys Asp Trp Val Arg Gln His Arg Lys Glu Glu Lys Met Lys Ser His
      130      135      140
Lys Leu Glu Glu Glu Phe Glu Trp Leu Lys Lys Ser Glu Val Leu Tyr
      145      150      155      160
Tyr Thr Val Glu Lys Lys Gly Asn Ile Ser Ser Gln Leu Lys His Tyr
      165      170      175
Asn Pro Trp Ser Met Lys Cys His Gln Gln Gln Leu Gln Arg Met Lys
      180      185      190
Glu Asn Ala Lys His Arg Asn Gln Tyr Lys Phe Ile Leu Leu Glu Asn
      195      200      205
Leu Thr Ser Arg Tyr Glu Val Pro Cys Val Leu Asp Leu Lys Met Gly
      210      215      220
Thr Arg Gln His Gly Asp Asp Ala Ser Glu Glu Lys Ala Ala Asn Gln
      225      230      235      240
Ile Arg Lys Cys Gln Ser Thr Ser Ala Val Ile Gly Val Xaa Val
      245      250      255
Cys Gly Met Gln Val Tyr Gln Ala Gly Ser Gly Gln Leu Met Phe Met
      260      265      270
Asn Lys Tyr His Gly Arg Lys Leu Ser Val Gln Gly Phe Lys Glu Ala
      275      280      285
Leu Phe Gln Phe Phe His Asn Gly Arg Tyr Leu Arg Arg Glu Leu Leu
      290      295      300
Gly Pro Val Leu Lys Lys Leu Thr Glu Leu Lys Ala Val Leu Glu Arg
      305      310      315      320
Gln Glu Ser Tyr Arg Phe Tyr Ser Ser Ser Leu Leu Val Ile Tyr Asp
      325      330      335
Gly Lys Glu Arg Pro Glu Val Val Leu Asp Ser Asp Ala Glu Asp Leu
      340      345      350
Glu Asp Leu Ser Glu Glu Ser Ala Asp Glu Ser Ala Gly Ala Tyr Ala
      355      360      365
Tyr Lys Pro Ile Gly Ala Ser Ser Val Asp Val Arg Met Ile Asp Phe
      370      375      380
Ala His Thr Thr Cys Arg Leu Tyr Gly Glu Asp Thr Val Val His Glu
      385      390      395      400
Gly Gln Asp Ala Gly Tyr Ile Phe Gly Leu Gln Ser Leu Ile Asp Ile
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Val Thr Glu Ile Ser Glu Glu Ser Gly Glu
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<210> 5501

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5501

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120

tgaagcgggg acaaaacat gcagctcaga ggtccctgtg ggggctgggg gagctgccct
180

gcaggtcttg gcacatgcac agcaggctcc ccatagcttt gtcaccacaa agggcactgt
240

tctattcaca gcacctcctg cttctgcctg gcaactgtgt ctccctgtgc tatatttaat
300

tccaccagca aagctggcga ggcagggccc agccctgaag gagatctcct tgcctgacct
360

ctggacctgg aaatggaggc ttcattgtgcc cgccttggcg gcttaagcct gctgctttgg
420

cagtgccatg ggtgagccga gcagctgtga ggtgggtggg gcagggctgt agcccacgcc
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gggtgctatt ccaggtctta ggggctggtg ctcacccca cccccagcga cttccgtcct
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568

<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

Met Ile Leu Gly Lys Arg Leu His Leu Asn Phe Arg Tyr Phe Thr Cys

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Glu Ala Gly Thr Lys Pro Cys Ser Ser Glu Val Pro Val Gly Ala Gly

20 25 30

Gly Ala Ala Leu Gln Val Leu Ala His Ala Gln Gln Ala Pro His Ser

35 40 45

Phe Val Thr Thr Lys Gly Thr Val Leu Phe Thr Ala Pro Pro Ala Ser

50 55 60

Ala Trp Gln Leu Cys Leu Pro Val Leu Tyr Leu Ile Pro Pro Ala Lys

65 70 75 80

Leu Ala Arg Gln Gly Pro Ala Leu Lys Glu Ile Ser Leu Pro Asp Pro

85 90 95

Trp Thr Trp Lys Trp Arg Leu His Val Pro Ala Leu Ala Ala

100 105 110

<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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120
atttaatcct cacaatagtc aagctaggaa ggtaagtgtg gaattattac cccatttgat
180
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240
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420
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540
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660
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1679

<210> 5504
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 5504

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Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
      35              40              45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
      50              55              60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
      65              70              75              80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
      85              90              95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
      100             105             110
Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
      115             120             125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
      130             135             140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
      145             150             155             160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
      165             170             175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
      180             185             190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
      195             200             205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
      210             215             220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
      225             230             235             240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
      245             250             255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
      260             265             270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
      275             280             285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
      290             295             300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
      305             310             315             320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
      325             330             335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
      340             345             350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
      355             360             365
Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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<210> 5505
<211> 1099
<212> DNA
<213> Homo sapiens

<400> 5505
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<210> 5506
<211> 280
<212> PRT
<213> Homo sapiens

<400> 5506

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 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
 245 250 255
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
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<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

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Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
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Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
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435

440

445

<210> 5509

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5509

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<210> 5510

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5510

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		20					25					30			
Gly	Val	Lys	Pro	Pro	Glu	Ser	His	Val	Cys	Gly	Glu	Val	Gly	Val	Gly
	35					40						45			
Tyr	Pro	Ser	Thr	Glu	Arg	His	Ile	Arg	Asp	Arg	Leu	Gly	Arg	Lys	Pro
	50				55						60				
Cys	Glu	Tyr	Gln	Glu	Cys	Arg	Gln	Lys	Ala	Tyr	Thr	Cys	Lys	Pro	Cys
65				70				75					80		
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<210> 5511
 <211> 379
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<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
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<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

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<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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			20					25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35					40					45			
Val	Ser	Glu	Asp	Gly	Asp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly	
	50					55				60					
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65				70					75					80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85					90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100					105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
	115					120					125				
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130				135					140					
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150					155					160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
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Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
          195          200          205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
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Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515

<211> 420

<212> DNA

<213> Homo sapiens

<400> 5515

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<211> 120

<212> PRT

<213> Homo sapiens

<400> 5516

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Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35     40     45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
50     55     60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65     70     75     80
Ser Lys Val Ile Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85     90     95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
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Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517

<211> 804

<212> DNA

<213> Homo sapiens

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<211> 85

<212> PRT

<213> Homo sapiens

<400> 5518

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Glu	Leu	Ser	Ser	Val	Leu	Tyr	Cys	Cys	Asp	Leu	Leu	Ile	Gly	Ile	Gly
		20					25					30			
Ile	Val	Val	Gly	Ser	Ser	Asp	Arg	Ile	Arg	Ala	Ser	Ser	Leu	Gln	Val
		35				40					45				
Gln	Lys	Gln	Phe	Lys	Thr	Leu	Met	Ile	Ala	Leu	Gln	Gln	Pro	Thr	His
	50				55			60							
Gly	Asp	Met	Val	Ile	Val	Pro	Thr	Cys	Cys	Ser	Val	Ile	Cys	Arg	Ala
65					70			75						80	
Ser	Asp	Trp	Phe	Lys											

85

<210> 5519
 <211> 401
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 <213> Homo sapiens

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<210> 5520
 <211> 101
 <212> PRT
 <213> Homo sapiens

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 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
 35 40 45
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe
 50 55 60
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
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 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
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 <212> DNA
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<212> PRT

<213> Homo sapiens

<400> 5522

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		20						25					30		
Ser	Ser	Lys	Asn	Val	Arg	Val	Asn	Cys	Leu	Asp	Glu	Asn	Gly	Met	Thr
		35					40					45			
Pro	Leu	Met	His	Ala	Ala	Tyr	Lys	Gly	Lys	Leu	Asp	Met	Cys	Lys	Leu
		50					55				60				
Leu	Leu	Arg	His	Gly	Ala	Asp	Val	Asn	Cys	His	Gln	His	Glu	His	Gly
		65			70					75				80	
Tyr	Thr	Ala	Leu	Met	Phe	Ala	Ala	Leu	Ser	Gly	Asn	Lys	Asp	Ile	Thr
			85					90						95	
Trp	Val	Met	Leu	Glu	Ala	Gly	Ala	Glu	Thr	Asp	Val	Val	Asn	Ser	Val
		100						105					110		
Gly	Arg	Thr	Ala	Ala	Gln	Met	Ala	Ala	Phe	Val	Gly	Gln	His	Asp	Cys
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<210> 5524

<211> 1193

<212> PRT

<213> Homo sapiens

<400> 5524

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Leu	Gln	Arg	Lys	Leu	Ala	Asp	Ser	Ser	His	Ser	Glu	Gln	Gln	Asp	Arg
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Asn	Arg	Val	Ser	Glu	Glu	Leu	Ile	Met	Val	Val	Gln	Glu	Met	Lys	Lys
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Tyr	Phe	Pro	Ser	Glu	Arg	Arg	Asn	Lys	Pro	Ser	Thr	Leu	Asp	Ala	Leu
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Asn	Tyr	Ala	Leu	Arg	Cys	Val	His	Ser	Val	Gln	Ala	Asn	Ser	Glu	Phe

4702

Tyr Thr Glu Pro Cys Glu Asp Leu Arg Asn Asp Glu His Ser Pro Ser
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 Tyr Asn Ile Pro Ala Leu Lys Arg Lys Cys Ile Ser Cys Thr Asn Thr
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 Val Gln Ala Leu Gln Gly Asn Lys Asn Ala Pro Gln Lys Met Pro Thr
 580 585 590
 Asn Gly Arg Ser Ile Asp Thr Gly Gly Gly Ala Pro Gln Ile Leu Ser
 595 600 605
 Thr Ala Met Leu Ser Leu Gly Ser Gly Ile Ser Gln Cys Gly Tyr Ser
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 Ser Thr Ile Val His Val Pro Pro Pro Glu Thr Ala Arg Asp Ala Thr
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 His Thr Gln Lys Glu Glu Gln Asn Tyr Val Asp Lys Phe Arg Glu Lys
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 690 695 700
 Lys Ala Lys Tyr Ser Tyr Phe Gln Gly Asp Ser Thr Ser Lys Gln Thr
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 Arg Ser Ala Gly Cys Arg Lys Gly Lys His Lys Arg Lys Lys Leu Pro
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 770 775 780
 Gln Ala Pro Tyr Leu Val Pro Ala Phe Pro Leu Pro Ala Ala Thr Ser
 785 790 795 800
 Pro Gly Arg Glu Tyr Ala Ala Pro Gly Thr Ala Pro Glu Gly Leu His
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 Gly Pro Pro Leu Ser Glu Gly Leu Gln Pro Tyr Pro Ala Phe Pro Phe
 820 825 830
 Pro Tyr Leu Asp Thr Phe Met Thr Val Phe Leu Pro Asp Pro Pro Val
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 Cys Pro Leu Leu Ser Pro Ser Phe Leu Pro Cys Pro Phe Leu Gly Ala
 850 855 860
 Thr Ala Ser Ser Ala Ile Ser Pro Ser Met Ser Ser Ala Met Ser Pro
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 885 890 895
 Lys Trp Glu Ala Gln Ser Glu Gly His Pro Phe Ile Thr Ser Arg Ser
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 Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Glu Glu Met Pro Arg Pro
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 Ser Glu Ser Pro Asp Gln Met Arg Arg Asn Thr Cys Pro Gln Thr Glu
 930 935 940

Tyr Gln Cys Val Thr Gly Asn Asn Gly Ser Glu Ser Ser Pro Ala Thr
 945 950 955 960
 Thr Gly Ala Leu Ser Thr Gly Ser Pro Pro Arg Glu Asn Pro Ser His
 965 970 975
 Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys Asn Pro
 980 985 990
 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys
 995 1000 1005
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<210> 5525

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5525

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<212> PRT

<213> Homo sapiens

<400> 5526

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		20					25					30			
Asn	Phe	Thr	Leu	Leu	Ala	Ser	Leu	Gly	Leu	Ala	Ser	Ser	Lys	Thr	His
		35				40					45				
Glu	Ile	Thr	Gln	Leu	Glu	Ser	Trp	Glu	Glu	Pro	Phe	Met	Pro	Ala	Trp
	50					55				60					
Glu	Val	Val	Thr	Ser	Ala	Ile	Pro	Arg	Glu	Thr	Leu	Arg	Met	Ala	Phe
65					70				75					80	
Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
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<210> 5527

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5527

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<210> 5528

<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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			20					25					30		
Val	Thr	Gly	Leu	Lys	Leu	Ser	Gln	Asp	Leu	Asp	Asp	Leu	Ala	Ile	Leu
		35					40					45			
Tyr	Leu	Ala	Thr	Val	Gln	Ala	Ile	Ala	Leu	Gly	Thr	Arg	Phe	Ile	Ile
		50				55					60				
Glu	Ala	Met	Glu	Ala	Ala	Gly	His	Ser	Ile	Ser	Thr	Leu	Phe	Leu	Cys
65					70					75				80	
Gly	Gly	Leu	Ser	Lys	Asn	Pro	Leu	Phe	Val	Gln	Met	His	Ala	Asp	Ile
				85					90					95	
Thr	Gly	Met	Pro	Val	Val	Leu	Ser	Gln	Glu	Val	Glu	Ser	Val	Leu	Val
			100					105					110		
Gly	Ala	Ala	Val	Leu	Gly	Ala	Cys	Ala	Ser	Gly	Asp	Phe	Ala	Ser	Val
		115					120					125			
Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
		130				135					140				
Arg	Leu	Gln	Asp	Lys	Lys	Tyr	Tyr	Asp	Lys	Lys	Tyr	Gln	Val	Phe	Leu
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<210> 5529

<211> 2602

<212> DNA

<213> Homo sapiens

<400> 5529

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<210> 5530

<211> 603

<212> PRT

<213> Homo sapiens

<400> 5530

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			20					25				30			
Leu	Asn	Leu	Cys	Ala	Arg	Arg	Arg	Thr	Arg	Val	Gln	Arg	Pro	Ile	Val
			35				40					45			
Arg	Leu	Leu	Ser	Cys	Pro	Gly	Thr	Val	Ala	Lys	Asp	Leu	Arg	Arg	Asp
			50				55				60				
Glu	Gln	Pro	Ser	Gly	Ser	Val	Glu	Thr	Gly	Phe	Glu	Asp	Lys	Ile	Pro
						70				75				80	
Lys	Arg	Arg	Phe	Ser	Glu	Met	Gln	Asn	Glu	Arg	Arg	Glu	Gln	Ala	Gln
				85				90					95		
Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
			100					105					110		
Leu	Lys	Tyr	Leu	Ser	Gln	Phe	Gly	Pro	Ile	Asn	Asn	His	Phe	Phe	Tyr
			115				120					125			
Glu	Ser	Phe	Gly	Leu	Tyr	Ala	Val	Val	Glu	Phe	Cys	Gln	Lys	Glu	Ser
			130				135				140				
Ile	Gly	Ser	Leu	Gln	Asn	Gly	Thr	His	Thr	Pro	Ser	Thr	Ala	Met	Glu

145 150 155 160
 Thr Ala Ile Pro Phe Arg Ser Arg Phe Phe Asn Leu Lys Leu Lys Asn
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 Gln Thr Ser Glu Arg Ser Arg Val Arg Ser Ser Asn Gln Leu Pro Arg
 180 185 190
 Ser Asn Lys Gln Leu Phe Glu Leu Leu Cys Tyr Ala Glu Ser Ile Asp
 195 200 205
 Asp Gln Leu Asn Thr Leu Leu Lys Glu Phe Gln Leu Thr Glu Glu Asn
 210 215 220
 Thr Lys Leu Arg Tyr Leu Thr Cys Ser Leu Ile Glu Asp Met Ala Ala
 225 230 235 240
 Ala Tyr Phe Pro Asp Cys Ile Val Arg Pro Phe Gly Ser Ser Val Asn
 245 250 255
 Thr Phe Gly Lys Leu Gly Cys Asp Leu Asp Met Phe Leu Asp Leu Asp
 260 265 270
 Glu Thr Arg Asn Leu Ser Ala His Lys Ile Ser Gly Asn Phe Leu Met
 275 280 285
 Glu Phe Gln Val Lys Asn Val Pro Ser Glu Arg Ile Ala Thr Gln Lys
 290 295 300
 Ile Leu Ser Val Leu Gly Glu Cys Leu Asp His Phe Gly Pro Gly Cys
 305 310 315 320
 Val Gly Val Gln Lys Ile Leu Asn Ala Arg Cys Pro Leu Val Arg Phe
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 Ser His Gln Ala Ser Gly Phe Gln Cys Asp Leu Thr Thr Asn Asn Arg
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<211> 3056

<212> DNA

<213> Homo sapiens

<400> 5531

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<212> PRT

<213> Homo sapiens

<400> 5532

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<211> 505

<212> DNA

<213> Homo sapiens

<400> 5533

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 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu
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<212> PRT

<213> Homo sapiens

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<210> 5538

<211> 352

<212> PRT

<213> Homo sapiens

<400> 5538

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Ala	Glu	Leu	Arg	His	Leu	Asp	Thr	Gln	Val	Gln	Arg	Cys	Glu	Asp	Ile
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Arg Asn Ile Trp Ile Val Lys Pro Gly Ala Lys Ser Arg Gly Arg Gly		
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Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn Gly		80
	85	90
Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
	100	105
Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp		110
	115	120
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp		125
	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
145	150	155
Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		160
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Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
	180	185
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		190
	195	200
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		205
	210	215
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		220
225	230	235
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		240
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Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala		255
	260	265
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp		270
	275	280
Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr		285
	290	295
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys		300
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Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		320
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<210> 5539

<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5539

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<210> 5540
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 <213> Homo sapiens

<400> 5540

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      35           40           45
Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
      50           55           60
Met Gln Glu Leu Phe Arg Gly His Ser Lys Thr Arg Glu Phe Leu Ala
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His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
      85           90           95
Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
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Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa
      115          120          125
Val Asp Gln Leu Cys Trp His Pro Ser Asn Pro Asp Leu Phe Val Thr
      130          135          140
Ala Ser Gly Asp Lys Thr Ile Arg Ile Trp Asp Val Arg Thr Thr Lys
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Cys Ile Ala Thr Val Asn Thr Lys Gly Glu Asn Ile Asn Ile Cys Trp
      165          170          175
Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val
      180          185          190
Thr Phe Ile Asp Ala Lys Thr His Arg Ser Lys Ala Glu Glu Gln Phe
      195          200          205
Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe
      210          215          220
Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu
      225          230          235          240
Leu Lys Pro Val Gln Ser Ile Asn Ala His Pro Ser Asn Cys Ile Cys
      245          250          255
Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
      260          265          270
Ala Leu Val Ser Leu Trp Asp Val Asp Glu Leu Val Cys Val Arg Cys
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Phe Ser Arg Leu Asp Trp Pro Val Arg Thr Leu Ser Phe Ser His Asp
      290          295          300
Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala
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Glu Val Glu Thr Gly Asp Lys Leu Trp Glu Val Gln Cys Glu Ser Pro
      325          330          335
Thr Phe Thr Val Ala Trp His Pro Lys Arg Pro Leu Leu Ala Phe Ala
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<211> 1854

<212> DNA

<213> Homo sapiens

<400> 5541

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<210> 5542

<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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Trp	Leu	Tyr	Ser	Arg	Gly	Val	Cys	Arg	Thr	Lys	Ser	Thr	Ser	Asp	Asn
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Glu	Thr	Ser	Arg	Lys	Asn	Glu	Val	Met	Thr	His	Ser	Gly	Leu	Trp	
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Arg	Thr	Cys	Cys	Leu	Glu	Gly	Ala	Phe	Arg	Gly	Val	Cys	Lys	Lys	Ile
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Leu	Leu	Arg	Ala	Val	Arg	Ala	Ser	Ser	Val	Phe	Pro	Ile	Leu	Ser	Val
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Thr	Leu	Leu	Phe	Phe	Gly	Gly	Leu	Cys	Val	Ala	Ala	Ser	Glu	Phe	His
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Ala	Gly	Leu	Ser	Asn	Ile	Ile	Gly	Ile	Ile	Val	Tyr	Ile	Ser	Ala	Asn
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Trp	Ser	Phe	Tyr	Phe	Gly	Ala	Phe	Ser	Phe	Ile	Ile	Ala	Glu	Ile	Val
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Ala	Lys	Ser	His	Ser	Glu	Phe	Leu	Lys	Lys	Ser	Thr	Phe	Ala	Arg	Leu
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Pro	Pro	Tyr	Arg	Tyr	Arg	Phe	Arg	Arg	Arg	Ser	Ser	Ser	Arg	Ser	Thr
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Glu	Pro	Arg	Ser	Arg	Asp	Leu	Ser	Pro	Ile	Ser	Lys	Gly	Phe	His	Thr

4724

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<210> 5544

<211> 1141

<212> PRT

<213> Homo sapiens

<400> 5544

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Ala Thr Ser Met Arg Thr Val Gly Lys Leu Pro Arg His Arg Pro Leu				
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Ser Arg Thr Gln Ser Ser Pro Leu Pro Gln Ser Pro Gln Ala Leu Gln				
	515	520		525
Gln Leu Val Met Gln Gln Gln His Gln Gln Phe Leu Glu Lys Gln Lys				
	530	535		540
Gln Gln Gln Leu Gln Leu Gly Lys Ile Leu Thr Lys Thr Gly Glu Leu				
545		550		555
Pro Arg Gln Pro Thr Thr His Pro Glu Glu Thr Glu Glu Glu Leu Thr				560
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Glu Gln Gln Glu Val Leu Leu Gly Glu Gly Ala Leu Thr Met Pro Arg				
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Glu Gly Ser Thr Glu Ser Glu Ser Thr Gln Glu Asp Leu Glu Glu Glu				
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Asp Glu Glu Glu Asp Gly Glu Glu Glu Glu Asp Cys Ile Gln Val Lys				
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Asp Glu Glu Gly Glu Ser Gly Ala Glu Glu Gly Pro Asp Leu Glu Glu				
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Pro Gly Ala Gly Tyr Lys Lys Leu Phe Ser Asp Ala Gln Pro Leu Gln				640
	645	650		655
Pro Leu Gln Val Tyr Gln Ala Pro Leu Ser Leu Ala Thr Val Pro His				
	660	665		670
Gln Ala Leu Gly Arg Thr Gln Ser Ser Pro Ala Ala Pro Gly Gly Met				
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Lys Ser Pro Pro Asp Gln Pro Val Lys His Leu Phe Thr Thr Gly Val				
	690	695		700
Val Tyr Asp Thr Phe Met Leu Lys His Gln Cys Met Cys Gly Asn Thr				
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His Val His Pro Glu His Ala Gly Arg Ile Gln Ser Ile Trp Ser Arg				
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Leu Gln Glu Thr Gly Leu Leu Ser Lys Cys Glu Arg Ile Arg Gly Arg				
	740	745		750
Lys Ala Thr Leu Asp Glu Ile Gln Thr Val His Ser Glu Tyr His Thr				
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Leu Leu Tyr Gly Thr Ser Pro Leu Asn Arg Gln Lys Leu Asp Ser Lys				
	770	775		780
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785		790		795
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Ser Ser Ala Val Arg Met Ala Val Gly Cys Leu Leu Glu Leu Ala Phe				
	820	825		830
Lys Val Ala Ala Gly Glu Leu Lys Asn Gly Phe Ala Ile Ile Arg Pro				
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Pro Gly His His Ala Glu Glu Ser Thr Ala Met Gly Phe Cys Phe Phe				
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Asn Ser Val Ala Ile Thr Ala Lys Leu Leu Gln Gln Lys Leu Asn Val				
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Gly Lys Val Leu Ile Val Asp Trp Asp Ile His His Gly Asn Gly Thr				880

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<210> 5545

<211> 1932

<212> DNA

<213> Homo sapiens

<400> 5545

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<210> 5546

<211> 183

<212> PRT

<213> Homo sapiens

<400> 5546

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 35 40 45
 Asn Glu Met Leu Leu Asn Phe Asn Asn Leu Ser Ser Ala Arg Leu Gln
 50 55 60
 Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
 65 70 75 80
 Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
 85 90 95
 Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
 100 105 110
 Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
 115 120 125
 Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
 130 135 140
 Pro Asp Thr Val Ser Pro Ser Leu Ser Pro Gly Phe Glu Asp Leu Ser
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<210> 5547

<211> 1391

<212> DNA

<213> Homo sapiens

<400> 5547

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<210> 5548

<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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		20					25					30			
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		35					40				45				
Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
	50					55					60				
Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
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Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
				85				90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
		100					105						110		
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
		115					120					125			
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

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<210> 5549

<211> 1865

<212> DNA

<213> Homo sapiens

<400> 5549

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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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			20					25					30		
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Glu	Tyr	Trp	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
	50				55					60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
65				70					75					80	
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
			85					90					95		
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		100				105						110			
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
	115				120							125			
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
	130				135						140				
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
			165					170					175		
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
			180					185					190		
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

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<210> 5551

<211> 1689

<212> DNA

<213> Homo sapiens

<400> 5551

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<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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		20						25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35					40					45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
		50				55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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<210> 5554

<211> 90

<212> PRT

<213> Homo sapiens

<400> 5554

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			20					25					30		
Pro	Gln	Pro	His	Pro	Thr	Ala	Ser	Pro	Asp	Pro	Lys	Val	Arg	Ile	Thr
			35				40					45			
Gly	Pro	Ala	Thr	Ala	Pro	Ala	Val	Val	Leu	Ser	His	Tyr	Arg	Gly	Cys
	50					55					60				
Tyr	Phe	Pro	Ser	Gln	Cys	Pro	Trp	Gln	Pro	Trp	Lys	Pro	Met	Lys	Gln
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Ala	Leu	Thr	Gln	Glu	Ser	Leu	Cys	Ile	Phe						
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<210> 5555

<211> 414

<212> DNA

<213> Homo sapiens

<400> 5555

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<210> 5556

<211> 115

<212> PRT

<213> Homo sapiens

<400> 5556

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Gly	Gln	Arg	Ser	Asp	Val	Gly	Phe	Arg	Lys	Gln	Gly	Pro	Gly	Gly	Asp
			20					25				30			
Glu	Ser	Gln	Gly	Cys	Asp	Ser	Arg	Arg	Asp	Ser	Cys	Glu	Gly	Pro	Gly

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Gln Ala Lys Leu Glu Asp Ser Pro Asp Leu Arg Gly Ser Thr Arg Ser		
50	55	60
Arg Cys Leu Leu Asp Leu Ser His Ser Ala His Pro Asn Leu Asn Pro		
65	70	75
Ala Pro Gly Pro Thr Pro Val Pro Trp Leu Glu Thr Gly Ala Ser Ala		
85	90	95
Gln Leu Phe Pro Phe Ser His Ser Leu Ser Ala Ala Cys Arg Val His		
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Ser Ala Ser		
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<210> 5557

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 5557

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<210> 5558

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5558

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Leu Asp Glu Leu Arg	Arg Val Ser Val Pro Tyr	Pro Ser Ser Leu Leu		
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Ser Pro Ser Arg Glu	Pro Pro Lys Met Asn Pro	Val Val Glu Pro Leu		
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Tyr Pro Thr Leu Gln	Pro Phe Gln Tyr Leu Glu	Glu Val His Ile Ser		
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Pro Asp Thr Asn Lys	Val Ala Phe Val Ser	Ala Gln Asn Thr Gly Val		
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<210> 5559

<211> 3866

<212> DNA

<213> Homo sapiens

<400> 5559

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<210> 5560

<211> 1165

<212> PRT

<213> Homo sapiens

<400> 5560

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Asn	Gly	Thr	Tyr	Gly	Gln	Val	Tyr	Lys	Gly	Arg	His	Val	Lys	Thr	Gly
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Gln	Leu	Ala	Ala	Ile	Lys	Val	Met	Asp	Val	Thr	Glu	Asp	Glu	Glu	Glu
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Glu	Ile	Lys	Leu	Glu	Ile	Asn	Met	Leu	Lys	Lys	Tyr	Ser	His	His	Arg
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Asn	Ile	Ala	Thr	Tyr	Tyr	Gly	Ala	Phe	Ile	Lys	Lys	Ser	Pro	Pro	Gly
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His	Asp	Asp	Gln	Leu	Trp	Leu	Val	Met	Glu	Phe	Cys	Gly	Ala	Gly	Ser
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Ile	Thr	Asp	Leu	Val	Lys	Asn	Thr	Lys	Gly	Asn	Thr	Leu	Lys	Glu	Asp
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Trp	Ile	Ala	Tyr	Ile	Ser	Arg	Glu	Ile	Leu	Arg	Gly	Leu	Ala	His	Leu
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His	Ile	His	His	Val	Ile	His	Arg	Asp	Ile	Lys	Gly	Gln	Asn	Val	Leu
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Gln	Leu	Asp	Arg	Thr	Val	Gly	Arg	Arg	Asn	Thr	Phe	Ile	Gly	Thr	Pro
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Tyr	Trp	Met	Ala	Pro	Glu	Val	Ile	Ala	Cys	Asp	Glu	Asn	Pro	Asp	Ala
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Thr	Tyr	Met	Gln	Arg	Pro	Thr	Thr	Glu	Gln	Leu	Leu	Lys	Phe	Pro	Phe
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His	Ile	Asp	Arg	Thr	Arg	Lys	Lys	Arg	Gly	Glu	Lys	Glu	Glu	Thr	Glu
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4744

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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
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Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
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Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile				
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Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr				
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
	1025		1030	1035
Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				
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Met Glu Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr				
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Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro				
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val				
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Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn				
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<210> 5561

<211> 2089

<212> DNA

<213> Homo sapiens

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<211> 372

<212> PRT

<213> Homo sapiens

<400> 5562

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			20					25					30		
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Arg	Ile	Leu	Lys	Arg	Ile	Thr	Val	Pro	Arg	Gly	Ala	Asp	Glu	Gln	Arg
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Lys	Cys	Asn	Val	Pro	Leu	Phe	Val	Gln	His	Asp	Ala	Ala	Gln	Leu	Tyr
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Leu	Lys	Leu	Trp	Asn	Leu	Ile	Lys	Asp	Gln	Ile	Thr	Asp	Val	His	Leu
145				150					155					160	
Val	Glu	Arg	Leu	Gln	Ala	Leu	Tyr	Thr	Ile	Arg	Val	Lys	Asp	Ser	Leu
			165					170					175		
Ile	Cys	Val	Asp	Cys	Ala	Met	Glu	Ser	Ser	Arg	Asn	Ser	Ser	Met	Leu
		180						185					190		
Thr	Leu	Pro	Leu	Ser	Leu	Phe	Asp	Val	Asp	Ser	Lys	Pro	Leu	Lys	Thr
		195					200					205			
Leu	Glu	Asp	Ala	Leu	His	Cys	Phe	Phe	Gln	Pro	Arg	Glu	Leu	Ser	Ser
	210					215					220				
Lys	Ser	Lys	Cys	Phe	Cys	Glu	Asn	Cys	Gly	Lys	Lys	Thr	Arg	Gly	Lys

225		230		235		240
Gln Val Leu Lys	Leu Thr His Leu Pro Gln Thr Leu Thr Ile His Leu					
	245		250		255	
Met Arg Phe Ser Ile Arg Asn Ser Gln Thr Arg Lys Ile Cys His Ser						
	260		265		270	
Leu Tyr Phe Pro Gln Ser Leu Asp Phe Ser Gln Ile Leu Pro Met Lys						
	275		280		285	
Arg Glu Ser Cys Asp Ala Glu Glu Gln Ser Gly Gly Gln Tyr Glu Leu						
	290		295		300	
Phe Ala Val Ile Ala His Val Gly Met Ala Asp Ser Gly His Tyr Cys						
305		310		315		320
Val Tyr Ile Arg Asn Ala Val Asp Gly Lys Trp Phe Cys Phe Asn Asp						
	325		330		335	
Ser Asn Ile Cys Leu Val Ser Trp Glu Asp Ile Gln Cys Thr Tyr Gly						
	340		345		350	
Asn Pro Asn Tyr His Trp Gln Glu Thr Ala Tyr Leu Leu Val Tyr Met						
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<210> 5563

<211> 2878

<212> DNA

<213> Homo sapiens

<400> 5563

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2878

<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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		20						25					30		
Ser	Ala	Glu	Arg	Ala	Leu	Glu	Glu	Ala	Val	Ala	Thr	Gly	Thr	Leu	Asn
		35					40					45			
Leu	Ser	Asn	Arg	Arg	Leu	Lys	His	Phe	Pro	Arg	Gly	Ala	Ala	Arg	Ser
		50				55					60				
Tyr	Asp	Leu	Ser	Asp	Ile	Thr	Gln	Ala	Asp	Leu	Ser	Arg	Asn	Arg	Phe
65					70					75				80	
Pro	Glu	Val	Pro	Glu	Ala	Ala	Cys	Gln	Leu	Val	Ser	Leu	Glu	Gly	Leu
				85					90					95	
Ser	Leu	Tyr	His	Asn	Cys	Leu	Arg	Cys	Leu	Asn	Pro	Ala	Leu	Gly	Asn
			100					105					110		
Leu	Thr	Ala	Leu	Thr	Tyr	Leu	Asn	Leu	Ser	Arg	Asn	Gln	Leu	Ser	Leu
		115					120					125			
Leu	Pro	Pro	Tyr	Ile	Cys	Gln	Leu	Pro	Leu	Arg	Val	Leu	Ile	Val	Ser
		130				135					140				
Asn	Asn	Lys	Leu	Gly	Ala	Leu	Pro	Pro	Asp	Ile	Gly	Thr	Leu	Gly	Ser
145				150					155					160	
Leu	Arg	Gln	Leu	Asp	Val	Ser	Ser	Asn	Glu	Leu	Gln	Ser	Leu	Pro	Ser
			165						170					175	
Glu	Leu	Cys	Gly	Leu	Ser	Ser	Leu	Arg	Asp	Leu	Asn	Val	Arg	Arg	Asn
		180						185					190		
Gln	Leu	Ser	Thr	Leu	Pro	Glu	Glu	Leu	Gly	Asp	Leu	Pro	Leu	Val	Arg
		195					200					205			
Leu	Asp	Phe	Ser	Cys	Asn	Arg	Val	Ser	Arg	Ile	Pro	Val	Ser	Phe	Cys
	210					215					220				
Arg	Leu	Arg	His	Leu	Gln	Val	Ile	Leu	Leu	Asp	Ser	Asn	Pro	Leu	Gln
225					230					235				240	
Ser	Pro	Pro	Ala	Gln	Val	Cys	Leu	Lys	Gly	Lys	Leu	His	Ile	Phe	Lys
			245						250					255	
Tyr	Leu	Ser	Thr	Glu	Ala	Gly	Gln	Arg	Gly	Ser	Ala	Leu	Gly	Asp	Leu

260	265	270
Ala Pro Ser Arg Pro Pro Ser Phe Ser Pro Cys Pro Ala Glu Asp Leu		
275	280	285
Phe Pro Gly His Arg Tyr Asp Gly Gly Leu Asp Ser Gly Phe His Ser		
290	295	300
Val Asp Ser Gly Ser Lys Arg Trp Ser Gly Asn Glu Ser Thr Asp Glu		
305	310	315
Phe Ser Glu Leu Ser Phe Arg Ile Ser Glu Leu Ala Arg Glu Pro Arg		
325	330	335
Gly Pro Arg Glu Arg Lys Glu Asp Gly Ser Ala Asp Gly Asp Pro Val		
340	345	350
Gln Ile Asp Phe Ile Asp Ser His Val Pro Gly Glu Asp Glu Glu Arg		
355	360	365
Gly Thr Val Glu Glu Gln Arg Pro Pro Glu Leu Ser Pro Gly Ala Gly		
370	375	380
Asp Arg Glu Arg Ala Pro Ser Ser Arg Arg Glu Glu Pro Ala Gly Glu		
385	390	395
Glu Arg Arg Arg Pro Asp Thr Leu Gln Leu Trp Gln Glu Arg Glu Arg		
405	410	415
Arg Gln Gln Gln Gln Ser Gly Ala Trp Gly Ala Pro Arg Lys Asp Ser		
420	425	430
Leu Leu Lys Pro Gly Leu Arg Ala Val Val Gly Gly Ala Ala Val		
435	440	445
Ser Thr Gln Ala Met His Asn Gly Ser Pro Lys Ser Ser Ala Ser Gln		
450	455	460
Ala Gly Gly Cys Ser Gly Ala Gly Ser Pro Ala Pro Ala Pro Ala Ser		
465	470	475
Gln Glu Pro Leu Pro Ile Ala Gly Pro Ala Thr Ala Pro Ala Pro Arg		
485	490	495
Pro Leu Gly Ser Ile Gln Arg Pro Asn Ser Phe Leu Phe Arg Ser Ser		
500	505	510
Ser Gln Ser Gly Ser Gly Pro Ser Ser Pro Asp Ser Val Leu Arg Pro		
515	520	525
Arg Arg Tyr Pro Gln Val Pro Asp Glu Lys Asp Leu Met Thr Gln Leu		
530	535	540
Arg Gln Val Leu Glu Ser Arg Leu Gln Arg Pro Leu Pro Glu Asp Leu		
545	550	555
Ala Glu Ala Leu Ala Ser Gly Val Ile Leu Cys Gln Leu Ala Asn Gln		
565	570	575
Leu Arg Pro Arg Ser Val Pro Phe Ile His Val Pro Ser Pro Ala Val		
580	585	590
Pro Lys Leu Ser Ala Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu		
595	600	605
Glu Ala Cys Arg Lys Met Gly Val Pro Glu Ala Asp Leu Cys Ser Pro		
610	615	620
Ser Asp Leu Leu Gln Gly Thr Ala Arg Gly Leu Arg Thr Ala Leu Glu		
625	630	635
Ala Val Lys Arg Val Gly Gly Lys Ala Leu Pro Pro Leu Trp Pro Pro		
645	650	655
Ser Gly Leu Gly Gly Phe Val Val Phe Tyr Val Val Leu Met Leu Leu		
660	665	670
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<210> 5565

<211> 472

<212> DNA

<213> Homo sapiens

<400> 5565

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 180
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<210> 5566

<211> 76

<212> PRT

<213> Homo sapiens

<400> 5566

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Ala	Met	Trp	Arg	Val	Glu	Ile	Thr	Gln	Phe	Phe	Gly	Asp	Arg	Val	Ser
			20				25					30			
Leu	Pro	Pro	Arg	Leu	Glu	Ser	Gly	Gly	Ala	Ile	Thr	Ala	His	Ser	Ser
			35				40				45				
Leu	Asp	Leu	Gln	Gly	Ser	Ser	Asp	Pro	Pro	Ala	Ser	Ala	Ser	Arg	Ala
	50				55					60					
Ala	Gly	Ser	Thr	Gly	Ala	Tyr	His	Ala	Trp	Leu	Phe				
65					70					75					

<210> 5567

<211> 968

<212> DNA

<213> Homo sapiens

<400> 5567

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 120
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 180
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 240

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 300
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 360
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 420
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 480
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 540
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 720
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 780
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 840
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 968

<210> 5568

<211> 130

<212> PRT

<213> Homo sapiens

<400> 5568

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 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys
 35 40 45
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser
 50 55 60
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser
 65 70 75 80
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg
 85 90 95
 Tyr Met Tyr Gln Ile Leu Lys Ala Ala Val Pro Lys Tyr His Lys Leu
 100 105 110
 His Gly Leu Lys Gln Gln Lys Phe Ile Pro Ser Gln Ser Trp Arg Pro
 115 120 125
 Asp Val
 130

<210> 5569

<211> 876

<212> DNA

<213> Homo sapiens

<400> 5569

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120
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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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20          25          30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35          40          45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50          55          60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65          70          75          80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85          90          95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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	100		105		110										
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	115						120				125				
Gly	Thr	Leu	Ala	Lys	Met	Gln	Cys	Leu	Pro	Asn	Ser	His	Ile	Ser	Phe
	130					135					140				
Asn	Gln	Gly	Ala	Ile	Pro	Ala	Trp	Lys	Ser	Pro	Ser	Cys	Ser	Cys	Trp
145					150					155				160	
Gln	Val	Gln	Val	Pro	Val	Cys	Asp	Gly							
				165											

<210> 5571

<211> 405

<212> DNA

<213> Homo sapiens

<400> 5571

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<210> 5572

<211> 135

<212> PRT

<213> Homo sapiens

<400> 5572

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			20					25					30		
Gln	Leu	Arg	Asp	Pro	Thr	Ser	Pro	Lys	Phe	Pro	Glu	Asp	Phe	Asp	Asp
	35					40					45				
Gly	Glu	His	Ala	Lys	Gln	Lys	Ser	Val	Ile	Ser	Trp	Leu	Leu	Asn	His
	50				55						60				
Asp	Pro	Ala	Lys	Arg	Pro	Thr	Ala	Thr	Glu	Leu	Leu	Lys	Ser	Glu	Leu
65				70					75					80	
Leu	Pro	Pro	Pro	Gln	Met	Glu	Glu	Ser	Glu	Leu	His	Glu	Val	Leu	His
			85				90					95			
His	Thr	Leu	Thr	Asn	Val	Asp	Gly	Lys	Ala	Tyr	Arg	Thr	Met	Met	Ala
			100				105					110			
Gln	Ile	Phe	Ser	Gln	Arg	Leu	Ala	Gly	Ala	Gly	Gly	Gly	Gly	Tyr	Arg
	115					120						125			
Ser	Arg	Leu	Gly	Val	Pro	Arg									

130

135

<210> 5573

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5573

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<210> 5574

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5574

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Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
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Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
           50           55           60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
           65           70           75           80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
           85           90           95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
           100          105          110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
           115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
           130          135          140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
           145          150          155          160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
           165          170          175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
           180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
           195          200          205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
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Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
           225          230          235          240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
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Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
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Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
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<210> 5575

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 5575

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<210> 5576

<211> 367

<212> PRT

<213> Homo sapiens

<400> 5576

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		35				40					45				
Gln	Leu	Leu	Gln	Cys	Leu	Val	Pro	Gly	Ser	Thr	Thr	Leu	His	Ser	Ala
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Glu	Ile	Leu	Ala	Glu	Ile	Ala	Arg	Ile	Leu	Arg	Pro	Gly	Gly	Cys	Leu
65				70				75						80	
Phe	Leu	Lys	Glu	Pro	Val	Glu	Thr	Ala	Val	Asp	Asn	Asn	Ser	Lys	Val
			85					90					95		
Lys	Thr	Ala	Ser	Lys	Leu	Cys	Ser	Ala	Leu	Thr	Leu	Ser	Gly	Leu	Val
		100						105				110			
Glu	Val	Lys	Glu	Leu	Gln	Arg	Glu	Pro	Leu	Thr	Pro	Glu	Glu	Val	Gln
		115				120					125				
Ser	Val	Arg	Glu	His	Leu	Gly	His	Glu	Ser	Asp	Asn	Leu	Leu	Phe	Val
	130				135						140				
Gln	Ile	Thr	Gly	Lys	Lys	Pro	Asn	Phe	Glu	Val	Gly	Ser	Ser	Arg	Gln
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<212> DNA
<213> Homo sapiens
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<210> 5578
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 5578
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 35 40 45
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
 50 55 60
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
 65 70 75 80
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
 85 90 95
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
 100 105 110
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
 115 120 125
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
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 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
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 Cys Ser Ile Ala Glu Pro
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<210> 5579
 <211> 1312
 <212> DNA
 <213> Homo sapiens

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<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

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		20						25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
		35					40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
	50					55					60				
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65					70					75					80
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85					90					95	
Pro	Ala	Val	Arg	Gln	Val	Asn	Pro	Gln	Asn	Ser	Val	Thr	Val	Arg	Val
			100					105					110		
Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
		115					120					125			
Thr	Gly	Pro	Gln	Leu	Thr	Val	His	His	Arg	Pro	Pro	Gln	Val	His	Thr
	130					135					140				
Glu	Pro	Pro	Arg	Pro	Val	His	Pro	Ala	Pro	Leu	Pro	Glu	Ala	Pro	Gln
145					150					155					160
Pro	Gln	Arg	Leu	Pro	Pro	Glu	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Gln	Lys

165 170 175
 Pro His Leu Lys Leu Ala Arg Val Gln Ser Gln Asn Gly Ile Val Leu
 180 185 190
 Ser Trp Ser Val Leu Glu Val Asp Arg Ser Cys Ala Thr Val Asp Ser
 195 200 205
 Tyr His Leu Tyr Ala Tyr His Glu Glu Pro Ser Ala Thr Val Pro Ser
 210 215 220
 Gln Trp Lys Lys Ile Gly Glu Val Lys Ala Leu Pro Leu Pro Met Ala
 225 230 235 240
 Cys Thr Leu Thr Gln Phe Val Ser Gly Ser Lys Tyr Tyr Phe Ala Val
 245 250 255
 Arg Ala Lys Asp Ile Tyr Gly Arg Phe Gly Pro Phe Cys Asp Pro Gln
 260 265 270
 Ser Thr Asp Val Ile Ser Ser Thr Gln Ser Ser
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<210> 5581

<211> 720

<212> DNA

<213> Homo sapiens

<400> 5581

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<211> 212

<212> PRT

<213> Homo sapiens

<400> 5582

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		20						25				30			
Ser	Leu	Ala	Ser	Arg	Glu	Leu	Pro	Val	Ser	Ser	Trp	Gln	Val	Thr	Glu
	35					40					45				
Pro	Ser	Ser	Lys	Asn	Leu	Trp	Glu	Gln	Ile	Cys	Lys	Glu	Tyr	Glu	Ala
	50				55					60					
Glu	Gln	Pro	Pro	Phe	Pro	Glu	Gly	Tyr	Lys	Val	Lys	Gln	Glu	Pro	Val
65				70					75					80	
Ile	Thr	Val	Ala	Pro	Val	Glu	Glu	Met	Leu	Phe	His	Gly	Phe	Ser	Ala
			85					90						95	
Glu	His	Tyr	Phe	Pro	Val	Ser	His	Phe	Thr	Met	Ile	Ser	Arg	Thr	Pro
		100						105					110		
Cys	Pro	Gln	Asp	Lys	Ser	Glu	Thr	Ile	Asn	Pro	Lys	Thr	Cys	Ser	Pro
	115					120						125			
Lys	Glu	Tyr	Leu	Glu	Thr	Phe	Ile	Phe	Pro	Val	Leu	Leu	Pro	Gly	Met
	130					135					140				
Ala	Ser	Leu	Leu	His	Gln	Ala	Lys	Lys	Glu	Lys	Cys	Phe	Glu	Val	Ser
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			165					170						175	
Ser	Asp	Asp	Ser	Ser	Leu	Ser	Trp	Tyr	His	Gln	Val	Val	Leu	Gln	Met
	180							185					190		
Thr	Pro	Ser	Gly	Gly	Lys	Ala	Cys	Val	Trp	Gly	His	Leu	Pro	Ser	Ser
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	210														

<210> 5583

<211> 2101

<212> DNA

<213> Homo sapiens

<400> 5583

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180

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240

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300

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420

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540

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2101

<210> 5584

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

Xaa Gly Arg Asp Cys Val Leu Leu Gln Glu Asp Phe Leu Ala His Arg
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 Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr
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 Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
 35 40 45
 Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
 50 55 60
 Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
 65 70 75 80
 Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
 85 90 95
 Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
 100 105 110
 Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
 115 120 125
 Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
 130 135 140
 Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
 145 150 155 160
 Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
 165 170 175
 Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
 180 185 190
 Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
 195 200 205
 Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
 210 215 220
 Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
 225 230 235 240
 Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
 245 250 255
 Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
 260 265 270
 Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
 275 280 285
 Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
 290 295 300
 Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
 305 310 315 320
 Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
 325 330 335
 Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
 340 345 350
 Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
 355 360 365
 Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
 370 375 380
 Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

385 390 395 400
 Glu His Met Ala Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
 405 410 415
 Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
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 Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
 435 440 445
 Lys Glu Asp Pro Ser Val
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<210> 5585

<211> 740

<212> DNA

<213> Homo sapiens

<400> 5585

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 180
 tttacaatc tataaatatt ttatacttaa aatcatgatt gagttgaaat aaaaaagtc
 240
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 300
 gagggatctg acaggatgct ggaaaaaatg actcagggaa gccgggcagc atgggctcct
 360
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 420
 cctcctctcc ccagtatctt tcccatctta agagatcctg tctacctac ctgtcacctc
 480
 cccaacccaa agactcctct aaacttcttt gcagcatgac agctgcctgc cctacactga
 540
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 600
 tggacttgac ataagtaccc cagccacatg gccttcaccc ttatgaccta gcaggcagaa
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 740

<210> 5586

<211> 87

<212> PRT

<213> Homo sapiens

<400> 5586

Met Gly Ser Phe Gly Asp Ser Gly Ala Glu Leu Ser Ser Thr Ser Leu
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 20 25 30
 Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

35 40 45
 Ser Ser Lys Leu Leu Cys Ser Met Thr Ala Ala Cys Pro Thr Leu Ser
 50 55 60
 Leu Leu Asp Leu Gln Leu Arg Leu Arg Arg Glu Val Gly Glu Gly His
 65 70 75 80
 Cys Pro Ile Leu Asp Leu Thr
 85

<210> 5587

<211> 853

<212> DNA

<213> Homo sapiens

<400> 5587

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 180
 acagtctcca aaaacttcag ctgaaggggg taatacatgg attgaaagag attgtcttga
 240
 aagggaaaat cccgtattgc ttcataagat gctctgaacg ttgggttgctt atcgatcatg
 300
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 360
 ctcccgtaga tgcagtgatc gggacggtag ttccactggc aggggaatac atagagacac
 420
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 480
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 540
 ctgttcttga actgggtact tcttatccga gttaaatcca ttaacatgac tctgaatta
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 720
 cagatgtcat caacaggtct cagaaagagg acatcggtgt ccacgtagag aagtgaagtc
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<210> 5588

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5588

Met Ala Pro Glu His Glu Ile Pro Lys Ile Gly Trp Tyr Ser Arg Phe
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 Ala Arg His Pro Phe Tyr Gly Ser Ala Gly Val Asn Ser Gly Val Met

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Leu Met Asn Leu Thr Arg Ile Arg Ser Thr Gln Phe Lys Asn Ser Met					
35			40		45
Ile Pro Thr Gly Leu Ala Trp Glu Asp Met Leu Tyr Pro Leu Tyr Gln					
50			55		60
Lys Tyr Lys Asn Ala Ile Thr Trp Gly Asp Gln Asp Leu Leu Asn Ile					
65			70		75
Ile Phe Tyr Phe Asn Pro Glu Cys Leu Tyr Val Phe Pro Cys Gln Trp					
85			90		95
Asn Tyr Arg Pro Asp His Cys Met Tyr Gly Ser Asn Cys Arg Glu Ala					
100			105		110
Glu His Glu Gly Val Ser Val Leu His Gly Asn Arg Gly Val Tyr His					
115			120		125
Asp Asp Lys Gln Pro Thr Phe Arg Ala Leu Tyr Glu Ala Ile Arg Asp					
130			135		140
Phe Pro Phe Gln Asp Asn Leu Phe Gln Ser Met Tyr Tyr Pro Leu Gln					
145			150		155
Leu Lys Phe Leu Glu Thr Val His Thr Leu Cys Gly Arg Ile Pro Gln					
165			170		175
Val Phe Leu Lys Gln Ile Glu Lys Thr Met Lys Arg Ala Tyr Glu Lys					
180			185		190
His Val Ile Ile His Val Gly Pro Asn Gln Met His					
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<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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120
gataacttca ccaagatgtc cagtgatagg caaagggtccg atgatgagag cccagcacc
180
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240
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300
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720

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<210> 5590

<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

Met	Ser	Ser	Asp	Arg	Gln	Arg	Ser	Asp	Asp	Glu	Ser	Pro	Ser	Thr	Ser	1	5	10	15
Ser	Gly	Ser	Ser	Asp	Ala	Asp	Gln	Arg	Asp	Pro	Ala	Ala	Pro	Glu	Pro	20	25	30	
Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn	35	40	45	
Thr	Lys	Leu	Ser	Ser	Lys	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys		50	55	60	
Arg	Ile	Gln	Lys	Glu	Leu	Ala	Glu	Ile	Thr	Leu	Asp	Pro	Pro	Pro	Asn	65	70	75	80
Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr	85	90	95	
Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu	100	105	110	
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr	115	120	125	
Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile	130	135	140	
Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser	145	150	155	160
Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala	165	170	175	
Asp	Pro	Leu	Val	Gly	Ser	Ile	Ala	Thr	Gln	Tyr	Leu	Thr	Asn	Arg	Ala	180	185	190	
Glu	His	Asp	Arg	Ile	Ala	Arg	Gln	Trp	Thr	Lys	Arg	Tyr	Ala	Thr					

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200

205

<210> 5591

<211> 2194

<212> DNA

<213> Homo sapiens

<400> 5591

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480
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<210> 5592

<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

Met Pro Ser Gly Ser Ala Arg Pro Val Ala Pro Gly Ala Arg Arg Leu
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 Thr Pro Leu Pro Ser Gly Asp Val Ala Ala Thr Phe Gln Phe Arg Thr
 35 40 45
 Arg Trp Asp Ser Asp Leu Gln Arg Glu Gly Val Ser His Tyr Arg Leu
 50 55 60
 Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser Leu Arg Glu
 65 70 75 80
 Leu His Leu Ser Phe Thr Gln Gly Phe Trp Arg Thr Arg Tyr Trp Gly
 85 90 95Pro Phe Leu
 Gln Ala Pro Ser Gly Ala Glu Leu Trp Val Trp Phe
 100 105 110
 Gln Asp Thr Val Thr Asp Val Asp Lys Ser Trp Arg Glu Leu Ser Asn
 115 120 125
 Val Leu Ser Gly Ile Phe Cys Ala Ser Leu Asn Phe Ile Asp Ser Thr
 130 135 140
 Asn Thr Val Thr Pro Thr Ala Ser Phe Lys Pro Leu Gly Leu Ala Asn

145					150					155				160
Asp	Thr	Asp	His	Tyr	Phe	Leu	Arg	Tyr	Ala	Val	Leu	Pro	Arg	Glu
					165					170				175
Val	Cys	Thr	Glu	Asn	Leu	Thr	Pro	Trp	Lys	Lys	Leu	Leu	Pro	Cys
					180					185				190
Ser	Lys	Ala	Gly	Leu	Ser	Val	Leu	Leu	Lys	Ala	Asp	Arg	Leu	Phe
					195					200				205
Thr	Ser	Tyr	His	Ser	Gln	Ala	Val	His	Ile	Arg	Pro	Val	Cys	Arg
					210					215				220
Ala	Arg	Cys	Thr	Ser	Ile	Ser	Trp	Glu	Leu	Arg	Gln	Thr	Leu	Ser
					225					230				235
Val	Phe	Asp	Ala	Phe	Ile	Thr	Gly	Gln	Gly	Lys	Lys	Asp	Trp	Ser
					240					245				250
Phe	Arg	Met	Phe	Ser	Arg	Thr	Leu	Thr	Glu	Pro	Cys	Pro	Leu	Ala
					255					260				265
Glu	Ser	Arg	Val	Tyr	Val	Asp	Ile	Thr	Thr	Tyr	Asn	Gln	Pro	Cys
					270					275				280
Cys	Val	Gln	Asp	Asn	Glu	Thr	Leu	Glu	Val	His	Pro	Pro	Pro	Thr
					285					290				295
Thr	Tyr	Gln	Asp	Val	Ile	Leu	Gly	Thr	Arg	Lys	Thr	Tyr	Ala	Ile
					300					305				310
Asp	Leu	Leu	Asp	Thr	Ala	Met	Ile	Asn	Asn	Ser	Arg	Asn	Leu	Asn
					315					320				325
Gln	Leu	Lys	Trp	Lys	Arg	Pro	Pro	Glu	Asn	Glu	Ala	Pro	Pro	Val
					330					335				340
Phe	Leu	His	Ala	Gln	Arg	Tyr	Val	Ser	Gly	Tyr	Gly	Leu	Gln	Lys
					345					350				355
Glu	Leu	Ser	Thr	Leu	Leu	Tyr	Asn	Thr	His	Pro	Tyr	Arg	Ala	Phe
					360					365				370
Val	Leu	Leu	Leu	Asp	Thr	Val	Pro	Trp	Tyr	Leu	Arg	Leu	Tyr	Val
					375					380				385
Thr	Leu	Thr	Ile	Thr	Ser	Lys	Gly	Lys	Glu	Asn	Lys	Pro	Ser	Tyr
					390					395				400
His	Tyr	Gln	Pro	Ala	Gln	Asp	Arg	Leu	Gln	Pro	His	Leu	Leu	Glu
					405					410				415
Leu	Ile	Gln	Pro	Ala	Asn	Ser	Val	Thr	Lys	Val	Ser	Ile	Gln	Phe
					420					425				430
Glu	Arg	Ala	Leu	Leu	Lys	Trp	Thr	Glu	Tyr	Thr	Pro	Asp	Pro	Asn
					435					440				445
Gly	Phe	Tyr	Val	Ser	Pro	Ser	Val	Leu	Ser	Ala	Leu	Val	Pro	Ser
					450					455				460
Val	Ala	Ala	Lys	Pro	Val	Asp	Trp	Glu	Glu	Ser	Pro	Leu	Phe	Asn
					465					470				475
Leu	Phe	Pro	Val	Ser	Asp	Gly	Ser	Asn	Tyr	Phe	Val	Arg	Leu	Tyr
					480					485				490
Glu	Pro	Leu	Val	Asn	Leu	Pro	Thr	Pro	Asp	Phe	Ser	Met	Pro	Tyr
					495					500				505
Asn	Val	Ile	Cys	Leu	Thr	Cys	Thr	Val	Val	Ala	Val	Cys	Tyr	Gly
					510					515				520
Phe	Tyr	Asn	Leu	Leu	Thr	Arg	Thr	Phe	His	Ile	Glu	Glu	Pro	Arg
					525					530				535
Gly	Gly	Leu	Ala	Lys	Arg	Leu	Ala	Asn	Leu	Ile	Arg	Arg	Ala	Arg
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Val	Pro	Pro	Leu							555				560
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580

<210> 5593

<211> 3078

<212> DNA

<213> Homo sapiens

<400> 5593

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1380

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<212> PRT

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<400> 5594

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<212> DNA

<213> Homo sapiens

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<212> DNA

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4080
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4200
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4260

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4320
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4380
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4492

<210> 5600

<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

Phe	Pro	Ala	Pro	Ala	Lys	Ala	Val	Val	Tyr	Val	Ser	Asp	Ile	Gln	Glu
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Leu	Tyr	Ile	Arg	Val	Val	Asp	Lys	Val	Glu	Ile	Gly	Lys	Thr	Val	Lys
			20					25					30		
Ala	Tyr	Val	Arg	Val	Leu	Asp	Leu	His	Lys	Lys	Pro	Phe	Leu	Ala	Lys
			35				40					45			
Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
			50			55				60					
Thr	Leu	Val	Ala	Leu	Asp	Glu	Ala	Leu	Asp	Asn	Tyr	Thr	Ile	Thr	Phe
65					70					75				80	
Leu	Ile	Arg	Gly	Val	Ala	Ile	Gly	Gln	Thr	Ser	Leu	Thr	Ala	Ser	Val
			85					90						95	
Thr	Asn	Lys	Ala	Gly	Gln	Arg	Ile	Asn	Ser	Ala	Pro	Gln	Gln	Ile	Glu
			100					105						110	
Val	Phe	Pro	Pro	Phe	Arg	Leu	Met	Pro	Arg	Lys	Val	Thr	Leu	Leu	Ile
			115				120					125			
Gly	Ala	Thr	Met	Gln	Val	Thr	Ser	Glu	Gly	Gly	Pro	Gln	Pro	Gln	Ser
			130			135					140				
Asn	Ile	Leu	Phe	Ser	Ile	Ser	Asn	Glu	Ser	Val	Ala	Leu	Val	Ser	Ala
145				150						155				160	
Ala	Gly	Leu	Val	Gln	Gly	Leu	Ala	Ile	Gly	Asn	Gly	Thr	Val	Ser	Gly
			165					170						175	
Leu	Val	Gln	Ala	Val	Asp	Ala	Glu	Thr	Gly	Lys	Val	Val	Ile	Ile	Ser
			180					185						190	
Gln	Asp	Leu	Val	Gln	Val	Glu	Val	Leu	Leu	Leu	Arg	Ala	Val	Arg	Ile
			195				200					205			
Arg	Ala	Pro	Ile	Met	Arg	Met	Arg	Thr	Gly	Thr	Gln	Met	Pro	Ile	Tyr
			210			215					220				
Val	Thr	Gly	Ile	Thr	Asn	His	Gln	Asn	Pro	Phe	Ser	Phe	Gly	Asn	Ala
225				230						235				240	
Val	Pro	Gly	Leu	Thr	Phe	His	Trp	Ser	Val	Thr	Lys	Arg	Asp	Val	Leu
			245						250					255	
Asp	Leu	Arg	Gly	Arg	His	His	Glu	Ala	Ser	Ile	Arg	Leu	Pro	Ser	Gln
			260				265						270		
Tyr	Asn	Phe	Ala	Met	Asn	Val	Leu	Gly	Arg	Val	Lys	Gly	Arg	Thr	Gly
			275				280					285			
Leu	Arg	Val	Val	Val	Lys	Ala	Val	Asp	Pro	Thr	Ser	Gly	Gln	Leu	Tyr
			290			295					300				
Gly	Leu	Ala	Arg	Glu	Leu	Ser	Asp	Glu	Ile	Gln	Val	Gln	Val	Phe	Glu

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305          310          315          320
Lys Leu Gln Leu Leu Asn Pro Glu Ile Glu Ala Glu Gln Ile Leu Met
          325          330          335
Ser Pro Asn Ser Tyr Ile Lys Leu Gln Thr Asn Arg Asp Gly Ala Ala
          340          345          350
Ser Leu Ser Tyr Arg Val Leu Asp Gly Pro Glu Lys Val Pro Val Val
          355          360          365
His Val Asp Glu Lys Gly Phe Leu Ala Ser Gly Ser Met Ile Gly Thr
          370          375          380
Ser Thr Ile Glu Val Ile Ala Gln Glu Pro Phe Gly Ala Asn Gln Thr
385          390          395          400
Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
          405          410          415
Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala Leu Val Ala Val
          420          425          430
Pro Leu Gly Met Thr Val Thr Phe Thr Val His Phe His Asp Asn Ser
          435          440          445
Gly Asp Val Phe His Ala His Ser Ser Val Leu Asn Phe Ala Thr Asn
          450          455          460
Arg Asp Asp Phe Val Gln Ile Gly Lys Gly Pro Thr Asn Asn Thr Cys
465          470          475          480
Val Val Arg Thr Val Ser Val Gly Leu Thr Leu Leu Arg Val Trp Asp
          485          490          495
Ala Glu His Pro Gly Leu Ser Asp Phe Met Pro Leu Pro Val Leu Gln
          500          505          510
Ala Ile Ser Pro Glu Leu Ser Gly Ala Met Val Val Gly Asp Val Leu
          515          520          525
Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu Ser Gly Thr Trp
          530          535          540
Ser Ser Ser Ala Asn Ser Ile Leu His Ile Asp Pro Lys Thr Gly Val
545          550          555          560
Ala Val Ala Arg Ala Val Gly Ser Val Thr Val Tyr Tyr Glu Val Ala
          565          570          575
Gly His Leu Arg Thr Tyr Lys Glu Val Val Val Ser Val Pro Gln Arg
          580          585          590
Ile Met Ala Arg His Leu His Pro Ile Gln Thr Ser Phe Gln Glu Ala
          595          600          605
Thr Ala Ser Lys Val Ile Val Ala Val Gly Asp Arg Ser Ser Asn Leu
          610          615          620
Arg Gly Glu Cys Thr Pro Thr Gln Arg Glu Val Ile Gln Ala Leu His
625          630          635          640
Pro Glu Thr Leu Ile Ser Cys Gln Ser Gln Phe Lys Pro Ala Val Phe
          645          650          655
Asp Phe Pro Ser Gln Asp Val Phe Thr Val Glu Pro Gln Phe Asp Thr
          660          665          670
Ala Leu Gly Gln Tyr Phe Cys Ser Ile Thr Met His Arg Leu Thr Asp
          675          680          685
Lys Gln Arg Lys His Leu Ser Met Lys Lys Thr Ala Leu Val Val Ser
          690          695          700
Ala Ser Leu Ser Ser Ser His Phe Ser Thr Glu Gln Val Gly Ala Glu
705          710          715          720
Val Pro Phe Ser Pro Gly Leu Phe Ala Asp Gln Ala Glu Ile Leu Leu
          725          730          735
Ser Asn His Tyr Thr Ser Ser Glu Ile Arg Val Phe Gly Ala Pro Glu

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<210> 5601
<211> 670
<212> DNA
<213> Homo sapiens
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<400> 5601
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120
gaacagagaa ggacgacagc ttctttgttg cgcaaactga ctacagcctc caatggaggg
180
gtcattgagg agttatcttg tgttagatcc aataactatg tgcaggaacc agagtgcagg
240
aggaatcttg ttcagtgcct ccttgagaag caggggactc ctgtggtaca agggtccttg
300
gagctagaga gggtcattgag ttccctcctg gacatgggtt tcagcaatgc ccatattaat
360
gaattgctca gtgtacggcg aggtgccagt cttcaacagt tgctggacat catttcagaa
420
tttattctct tgggtctgaa tccagagcct gtgtgtgtgg tcttgaagaa aagtccccag
480
ttattgaaac tgctatttat gcaaattagg aagcgctcca gttacctgca aaagcttggg
540
cttgaggaga ggaaattaa gaggggtgctt tactgttgcc ctgaaatttt caccatgcgc
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660
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670

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<210> 5602
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 5602
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 Arg Arg Thr Thr Ala Ser Leu Leu Arg Lys Leu Thr Thr Ala Ser Asn
 35 40 45
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val
 50 55 60
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys
 65 70 75 80
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met
 85 90 95
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu
 100 105 110
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile
 115 120 125
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val
 130 135 140
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg
 145 150 155 160
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu
 165 170 175
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln
 180 185 190
 Asp Ile Asn Asp Thr Val Arg Leu Leu Lys Glu Lys Cys Leu Phe Thr
 195 200 205
 Val Pro Leu His Ala
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<210> 5603
 <211> 2070
 <212> DNA
 <213> Homo sapiens

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 120
 catgatggag acccttcaaa tttgcttatg ttctttttca gcctatagac cagatataat
 180
 aattagcttt tcttctcttg cagattccag agagtcctct atttcatatg tgccctccag
 240
 aacatctctt gtggatttca ctacttggt tctgtgttca tgggagtcac cctcatcat
 300
 gtctgcaggc cccagggcaa tgtgagtcag gttgttttcc ataactcactc taattggagt
 360

ttggaggaca ccggggccct gttgtcttca ggccagaaag attatgttac ggtgcagttg
420
cagaatgggt agatctggga gctctcaagg tgtagcagga ataagagggga gaacacatcg
480
agtttgggct atgaatacac tggcagtaag aaagagtttc cttgtgtgga tggctacata
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600
aaatggcttg caatgctgat ccagccccta tttatgtttg gagtcctact gggatcggtg
660
acttttggct acttttctga caggctagga cgccgggtgg tcttgtgggc cacaagcagt
720
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780
gctcgctttt ttcttgccat ggttgcaagt ggctatcttg tgggtggggt tgtctatgtg
840
atggaattca ttggcatgaa gtctcggaca tgggcgtctg tccatttgca ttctttttt
900
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960
cagatgatec tctccacagt gactgtcccc tttatcctgt gctgttgggt gctcccagag
1020
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1080
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1140
caaggtcctg ttagtaatag cccactgaa gttcagaagc acaacctatc atatctgttt
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1920
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1980

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 2040
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 2070

<210> 5604

<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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			20					25					30		
His	Val	Cys	Arg	Pro	Pro	Gly	Asn	Val	Ser	Gln	Val	Val	Phe	His	Asn
		35					40					45			
His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly
	50					55					60				
Gln	Lys	Asp	Tyr	Val	Thr	Val	Gln	Leu	Gln	Asn	Gly	Glu	Ile	Trp	Glu
65				70					75					80	
Leu	Ser	Arg	Cys	Ser	Arg	Asn	Lys	Arg	Glu	Asn	Thr	Ser	Ser	Leu	Gly
			85					90						95	
Tyr	Glu	Tyr	Thr	Gly	Ser	Lys	Lys	Glu	Phe	Pro	Cys	Val	Asp	Gly	Tyr
			100					105					110		
Ile	Tyr	Asp	Gln	Asn	Thr	Trp	Lys	Ser	Thr	Ala	Val	Thr	Gln	Trp	Asn
		115					120					125			
Leu	Val	Cys	Asp	Arg	Lys	Trp	Leu	Ala	Met	Leu	Ile	Gln	Pro	Leu	Phe
	130					135					140				
Met	Phe	Gly	Val	Leu	Leu	Gly	Ser	Val	Thr	Phe	Gly	Tyr	Phe	Ser	Asp
145				150					155					160	
Arg	Leu	Gly	Arg	Arg	Val	Val	Leu	Trp	Ala	Thr	Ser	Ser	Ser	Met	Phe
			165					170						175	
Leu	Phe	Gly	Ile	Ala	Ala	Ala	Phe	Ala	Val	Asp	Tyr	Tyr	Thr	Phe	Met
		180					185						190		
Ala	Ala	Arg	Phe	Phe	Leu	Ala	Met	Val	Ala	Ser	Gly	Tyr	Leu	Val	Val
	195						200					205			
Gly	Phe	Val	Tyr	Val	Met	Glu	Phe	Ile	Gly	Met	Lys	Ser	Arg	Thr	Trp
	210				215						220				
Ala	Ser	Val	His	Leu	His	Ser	Phe	Phe	Ala	Val	Gly	Thr	Leu	Leu	Val
225				230					235					240	
Ala	Leu	Thr	Gly	Tyr	Leu	Val	Arg	Thr	Trp	Trp	Leu	Tyr	Gln	Met	Ile
			245					250						255	
Leu	Ser	Thr	Val	Thr	Val	Pro	Phe	Ile	Leu	Cys	Cys	Trp	Val	Leu	Pro
		260					265						270		
Glu	Thr	Pro	Phe	Trp	Leu	Leu	Ser	Glu	Gly	Arg	Tyr	Glu	Glu	Ala	Gln
	275					280						285			
Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys
	290				295						300				
Leu	Ser	Glu	Leu	Leu	Ser	Leu	Asp	Leu	Gln	Gly	Pro	Val	Ser	Asn	Ser
305				310					315					320	
Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp
			325					330						335	
Ser	Ile	Thr	Lys	Arg	Thr	Leu	Thr	Val	Trp	Leu	Ile	Trp	Phe	Thr	Gly

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<210> 5605
<211> 376
<212> DNA
<213> Homo sapiens
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<210> 5606
<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5606

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Met Thr Arg Ala Leu Leu Thr Ser Leu Val Leu Leu Pro Ala Arg Gln
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Ala His Pro Cys Arg Ala Leu Ala Leu Thr Ala Pro Ile Phe Leu Leu
      20           25           30
Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35           40           45
Asp Val Pro Ser Ser Ser Leu Glu Arg Pro Pro Trp Met Thr Glu Glu
      50           55           60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
      65           70           75           80
Ser Gln Cys Leu Ala Pro Ser Asn Ile Ala Phe Cys Val Tyr His Gln
      85           90           95
Phe Pro Phe Thr Arg
      100

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<210> 5607

<211> 320

<212> DNA

<213> Homo sapiens

<400> 5607

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ggtttggggc gacacgcgga aggccgggtg gagcccatcc atgctgtggt gttgcctcga
120
gggaagtgcg tggaccagtg tgtggagacc ctgcagaagc agaccagggt tggcaaggct
180
ggcaccaaca agccccccag gtgccgggga agaggggcca ggctggggg cgcgccagct
240
cctcggaatg tgtttgactt cctcaatgaa aagctgcaag gtcaggctcc tggggcccta
300
caagccgggc ggcctcagca
320

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<210> 5608

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5608

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Val His Thr Arg Gly Ile Gly Ser Arg Leu Leu Thr Lys Met Gly Tyr
 1           5           10           15
Glu Phe Gly Lys Gly Leu Gly Arg His Ala Glu Gly Arg Val Glu Pro
      20           25           30
Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35           40           45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50           55           60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
      65           70           75           80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
      85           90           95
Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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100

105

<210> 5609

<211> 1843

<212> DNA

<213> Homo sapiens

<400> 5609

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120
tttaacattt cagtccattc acttttttta aaataaaaat aggacaaatt attcaattac
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240
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300
gttattgtaa ttctgaatgt actcatcgtg tttctcactt ctacagaagc atcctcagtg
360
agttgtattg tgcgagaaaa tgacaccctt gccacatca ctctccattc catagagggg
420
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480
gtcgagaaaa tccaaaagtg ggctttgggc ttaccttaa taggaatgga atgtaccact
540
acgagatggt catcataata aggacattgt tgtttgagcg gggggtgtgc aatcagtata
600
aatgaggatg gcggaggaag aggagtgtg actgaaggga ggtggtgcat aataagtga
660
cgagctacac aaagctcgag ctacacaaag ctacaggtcc acgggcctcg ccttggtcc
720
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780
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840
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960
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1020
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1080
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 1560
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 1620
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 1680
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 1740
 aantatagtt ttagaatata gtctgatatg acaaagtagg gattttttaa gcctaacatt
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 1843

<210> 5610

<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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Phe	Thr	Ala	Cys	Ser	Ser	Arg	Val	Gln	Met	Ala	Cys	Ile	Cys	Ala	Val
		20						25					30		
Phe	Thr	Gly	Gly	Arg	Gln	Asp	His	Thr	Ser	Leu	Pro	His	Trp	Ala	Cys
	35					40						45			
Leu	Leu	Val	Asp	Ser	Cys	Met	Gln	Glu	Ala	Val	Met	Gly	Ser	Leu	Arg
	50					55					60				
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65					70				75					80	
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
			85					90						95	
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
			100					105						110	
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
		115					120						125		
Glu	Ile	Phe	Ile	Gln	Pro	Thr	Arg	Phe	Asn	Arg	Ser	Leu	Gly	Ser	Ser
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<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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Pro	Trp	Ala	Val	Gln	Ala	Val	Glu	His	Glu	Glu	Val	Ala	Gln	Arg	Val
			20					25					30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
		35					40					45			
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
		50					55				60				
Asn	Ala	Val	Leu	Asn	Lys	Leu	Lys	Thr	Ala	Ile	Gly	Ala	Val	Glu	Lys
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<212> DNA
<213> Homo sapiens
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600

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 720
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 780
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<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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		20					25					30			
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35					40					45			
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
		50					55					60			
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
		65					70				75				80
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

	85		90		95										
Val	Lys	Leu	Leu	Glu	Ile	Ser	Ala	Glu	Asp	Ala	Glu	Arg	Trp	Glu	Arg
	100		105		110										
Lys	Lys	Lys	Arg	Lys	Asn	Pro	Asp	Leu	Gly	Phe	Ser	Asp	Tyr	Ala	Ala
	115		120		125										
Ala	Gln	Leu	Arg	Gln	Tyr	His	Arg	Leu	Thr	Lys	Gln	Ile	Lys	Pro	Asp
	130		135		140										
Met	Glu	Thr	Tyr	Glu	Arg	Leu	Arg	Glu	Lys	His	Gly	Glu	Glu	Phe	Phe
	145		150		155										
Pro	Thr	Ser	Asn	Ser	Leu	Leu	His	Gly	Thr	His	Val	Pro	Ser	Thr	Glu
	165		170		175										
Glu	Ile	Asp	Arg	Met	Val	Ile	Asp	Leu	Glu	Lys	Gln	Ile	Glu	Lys	Arg
	180		185		190										
Asp	Lys	Tyr	Ser	Arg	Arg	Arg	Pro	Tyr	Asn	Asp	Asp	Ala	Asp	Ile	Asp
	195		200		205										
Tyr	Ile	Asn	Glu	Arg	Asn	Ala	Lys	Phe	Asn	Lys	Lys	Ala	Glu	Arg	Phe
	210		215		220										
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Ala	Val														

<210> 5615

<211> 1522

<212> DNA

<213> Homo sapiens

<400> 5615

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 240
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 300
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<210> 5616

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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	20							25					30		
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
	35						40					45			
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro
	50					55				60					
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65					70					75				80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90						95	
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
		100						105					110		
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
		115					120						125		
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
	130					135					140				
Ser	Glu	Pro	Arg	Met	Leu	Trp	Gly	Ser	Asp	Pro	Tyr	Pro	His	Ala	Glu
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Pro	Gln	Gln	Ala	Thr	Thr	Pro	Lys	Ala	Thr	Glu	Glu	Pro	Glu	Asp	Val


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<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
		35					40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
	50				55						60				
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75				80	
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
				85					90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
		115				120						125			
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155				160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165					170					175		
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
		180						185				190			
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
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Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
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Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235				240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
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Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290					295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
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Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325					330						335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

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Leu Gln Gln Lys Val Ser Ile Pro Leu Thr Glu Gly Leu Asp Leu Ile
      370      375      380
Ser Met Leu Thr Asp Asp Ala Thr Ile Ala Ala Trp Asn Asn Glu Gly
385      390      395      400
Leu Pro Ser Asp Arg Met Ser Thr Glu Asn Ala Ala Ile Leu Thr His
      405      410      415
Cys Glu Arg Trp Pro Leu Val Ile Asp Pro Gln Gln Gln Gly Ile Lys
      420      425      430
Trp Ile Lys Asn Lys Tyr Gly Met Asp Leu Lys Val Thr His Leu Gly
      435      440      445
Gln Lys Gly Phe Leu Asn Ala Ile Glu Thr Ala Leu Ala Phe Gly Asp
      450      455      460
Val Ile Leu Ile Glu Asn Leu Glu Glu Thr Ile Asp Pro Val Leu Asp
465      470      475      480
Pro Leu Leu Gly Arg Asn Thr Ile Lys Lys Gly Lys Tyr Ile Arg Ile
      485      490      495
Gly Asp Lys Glu Cys Glu Phe Asn Lys Asn Phe Arg Leu Ile Leu His
      500      505      510
Thr Lys Leu Ala Asn Pro His Tyr Lys Pro Glu Leu Gln Ala Gln Thr
      515      520      525
Thr Leu Leu Asn Phe Thr Val Thr Glu Asp Gly Leu Glu Ala Gln Leu
      530      535      540
Leu Ala Glu Val Val Ser Ile Glu Arg Pro Asp Leu Glu Lys Leu Lys
545      550      555      560
Leu Val Leu Thr Lys His Gln Asn Asp Phe Lys Ile Glu Leu Lys Tyr
      565      570      575
Leu Glu Asp Asp Leu Leu Leu Arg Leu Ser Ala Ala Glu Gly Ser Phe
      580      585      590
Leu Asp Asp Thr Lys Leu Val Glu Arg Leu Glu Ala Thr Lys Thr Thr
      595      600      605
Val Ala Glu Ile Glu His Lys Val Ile Glu Ala Lys Glu Asn Glu Arg
      610      615      620
Lys Ile Asn Glu Ala Arg Glu Cys Tyr Arg Pro Val Ala Ala Arg Ala
625      630      635      640
Ser Leu Leu Tyr Phe Val Ile Asn Asp Leu Gln Lys Ile Asn Pro Leu
      645      650      655
Tyr Gln Phe Ser Leu Lys Ala Phe Asn Val Leu Phe His Arg Ala Ile
      660      665      670
Glu Gln Ala Asp Lys Val Glu Asp Met Gln Gly Arg Ile Ser Ile Leu
      675      680      685
Met Glu Ser Ile Thr His Ala Val Phe Leu Tyr Thr Ser Gln Ala Leu
      690      695      700
Phe Glu Lys Asp Lys Leu Thr Phe Leu Ser Gln Met Ala Phe Gln Ile
705      710      715      720
Leu Leu Arg Lys Lys Glu Ile Asp Pro Leu Glu Leu Asp Phe Leu Leu
      725      730      735
Arg Phe Thr Val Glu His Thr His Leu Ser Pro Val Asp Phe Leu Thr
      740      745      750
Ser Gln Ser Trp Ser Ala Ile Lys Ala Ile Ala Val Met Glu Glu Phe
      755      760      765
Arg Gly Ile Asp Arg Asp Val Glu Gly Ser Ala Lys Gln Trp Arg Lys

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770	775	780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp		
785	790	795
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg		800
	805	810
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu		815
	820	825
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe		830
	835	840
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly		845
	850	855
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe		860
865	870	875
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln		880
	885	890
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His		895
	900	905
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr		910
	915	920
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr		925
	930	935
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile		940
945	950	955
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro		960
	965	970
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp		975
	980	985
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln		990
	995	1000

<210> 5619

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 5619

aagccgagaga gctggagctt tgaagccacc ccggtcaaag gatgctgagt ccggagcgcc
60
tagccctacc ggactacgag tatctggctc agcgacatgt cctcacctac atggaggatg
120
cagtgtgcca gctgctagaa aacagggaag atattagcca atatggaatt gccaggttct
180
tcaactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
240
tcgtccaagc cccccccac aatagggtat catttttacg ggccttctgg agatgcttcc
300
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
360
tactgtgtcc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
420
acgatgccat ggactgcttg atgtcttttt cagatttccct ctttgccttc cagatccagt
480
tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
540

agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcacgc caacgacctg
 600
 ccttgggcgg ggccggcacg ctggagggcg tggagggctc gctgttctac cagtgtctgg
 660
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgctc aaagaggccc
 720
 tcagcaatgt tcagagactg accttctatg gattcctcat ggctctctca aagcacctg
 780
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca
 840
 acacagggag cagctggcct ctgttagcaa cacggctcca gaggggaagg ggcacacca
 900
 tctctgcctt gacttcccag ggccggactc aatcccaggg agcaggaata tggcgacaaa
 960
 acatggctct tacacattcc catggtaggg gacagccctc cctgctgca gccctgcccc
 1020
 aacatgaac cacctcccca tagcagaagc gccagcccc tctcagaga acccagctc
 1080
 tgctttgggg agcagcctgc aggtcgggca gacacaggac tatttactca gtgacgtag
 1140
 agattatata tcagagagac ctgaatccca ttataaaca aggcaaaggt gtgtctgcgg
 1200
 agaccttttt tccaagctg
 1219

<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
1				5				10						15	
Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
			35					40					45		
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
			50					55				60			
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65					70				75					80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85						90					95	
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105						110	
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
			115					120						125	
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
			130					135						140	
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145					150				155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165						170					175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

180 185 190
 Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
 195 200 205
 Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
 210 215 220
 Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
 225 230 235 240
 Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
 245 250 255
 Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
 260 265 270
 Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
 275 280 285
 Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
 290 295 300
 Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
 305 310 315 320
 Leu Pro Ala Ala Leu Pro Gln His Glu Thr Thr Ser Pro
 325 330

<210> 5621

<211> 456

<212> DNA

<213> Homo sapiens

<400> 5621

tttttgtgaa atagaattta ttgtggtctt gattatgtac acgtgagatg gcttggctgg
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 gccggccggg ctcacatggt ttgtacaata aatacatctg tggggcgggc tctccgcagc
 120
 cggaagggc caccgccacg gttcagtcca gcttccgggc tcccagcttc atggggccct
 180
 tggccacctt cctctcggcg cgtttggcct ccattctccg ccgccgtcc tcgcgttct
 240
 tccgggccag ctcagccttg acctgtctg ggtgctggga cgtgcagaca gggtagcgaa
 300
 ggggtcgccc ttgtcgctgg actctgggcc accccagtta tactcgctgg ccagccgtgt
 360
 accgtcagga ggtggctcct gggagcttgg ctgaaccctg ggcggtggcc ctcccggt
 420
 gcggagagcc cgccccacag atgtatttat tgtaca
 456

<210> 5622

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5622

Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
 1 5 10 15
 Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
 20 25 30
 Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe


```

      35          40          45
Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
      50          55          60
Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
      65          70          75          80
Thr Gly

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<210> 5623

<211> 357

<212> DNA

<213> Homo sapiens

<400> 5623

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nctggaagaa ctgcatgc tctttgtagc gtggtgcttc tgttgctcac aggacaactt
60
gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
120
cggccaatgc ctctgggagc aaggatcctt ttccacgggtg tgttctatgc cgggggcttt
180
gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccgaggca caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaacac ttcgtggaca ttgttgatgc caagttg
357

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<210> 5624

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5624

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Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
1      5      10      15
Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
      20      25      30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
      35      40      45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
      50      55      60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
      65      70      75      80
Val Asp Ile Val Asp Ala Lys Leu
      85

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<210> 5625

<211> 1017

<212> DNA

<213> Homo sapiens

<400> 5625

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gccgactcgt ggtacctggc gcttctgggc ttcgctgagc acttccgcac ttccagcccg
60

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cccaaaatcc gcctgtgcgt gcactgcctg caggccgtgt tccccctcaa gccgccgcag
 120
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
 180
 agcgagcagg cgcgagacca cctggagaag gcgtgggtga tatcacagca aatccacag
 240
 ttcgaagatg ttaaatttga agcagcaagt ctgttgtctg aattgtactg tcaagagaat
 300
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca
 360
 tattggcact gccgcctgct cttccagctc gctcaactgc acacgcttga gaaggacctg
 420
 gtgtcggcct gtgacctcct ggggttaggg gccgagtacg cccgggtggg gggatctgaa
 480
 tacacacggg cgctgttcct cctcagcaag gggatgctgc tgctgatgga gcgaaagctg
 540
 caggaggtgc accgcgtgct gacctctctg gggcagatcg tggagaactg gcaggggaac
 600
 cccatccaga aggagtcgct gcgtgtcttc ttctgggtgc tccaggtcac ccactatctg
 660
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag
 720
 accatctcca cactgcacga tgatgagatc ctgccagca accccgctga cctcttccac
 780
 tggtgcccc aggagcacat gtgtgtgctt gtctacctgg tgactgtgat gcactccatg
 840
 caggccggct acctggagaa ggcgcagaag tacacggaca aggcctcat gcagctggag
 900
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag
 960
 cacatcatca tgtgccgctt tgtcacgggt cacaaggcca cggcgtgca ggagatc
 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
		50				55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75				80		
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85					90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100				105						110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115 120 125
 Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
 130 135 140
 Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
 145 150 155 160
 Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
 165 170 175
 Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
 180 185 190
 Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
 195 200 205
 Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
 210 215 220
 Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln
 225 230 235 240
 Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
 245 250 255
 Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
 260 265 270
 Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
 275 280 285
 Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
 290 295 300
 Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
 305 310 315 320
 His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
 325 330 335
 Gln Glu Ile

<210> 5627

<211> 1401

<212> DNA

<213> Homo sapiens

<400> 5627

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 cagcgagggg cagcagctgg cccaaccogg aggcagagcg gcaactgaac tctagccgga
 120
 aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgaccctca
 180
 catctgttcc tcgcgcccc gatggcttct gctgcctgct ccatggaccc catcgacagc
 240
 tttgagctcc tggatctcct gtttgaccgg caggacggca tcttgagaca cgtggagctg
 300
 ggcgagggct ggggtcacgt caaggaccag gtcttgccaa acccggactc tgacgacttc
 360
 ctcagctcca tcttgggctc tggagactca ctgccagct cccactctg gtccccgaa
 420
 ggcagtata gtggcatctc cgaagacctc ccctccgacc ccaggacac ccctccacgc
 480
 agcggaccag ccacctcccc cgccggctgc catcctgccc agcctggcaa ggggacctgc
 540

ctctcctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa
 600
 cagcatcacc tgggggcctc ctacctcctg cgacctgggg ctgggcactg tcaggagctg
 660
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcaccct gccactcag
 720
 ctgcccctca ctaagtacga ggagcgagtg ctgaaaaaaa tccgccggaa aatccggaac
 780
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctggagact
 840
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 900
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 960
 acgatgctgc ctcccgctg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc
 1020
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 1080
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 1200
 cgagcactgg ctcaggacgt gcagggtctg agggggcggg agacgagctg tgagccccac
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 1320
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 1380
 ggcacagctc atagccacac a
 1401

<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1				5					10					15	
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
		20					25						30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35				40					45				
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
		50				55					60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
				70					75					80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
				85					90					95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100					105					110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
			115				120					125			
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

130 135 140
 Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
 145 150 155 160
 Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
 165 170 175
 Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
 180 185 190
 Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
 195 200 205
 Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
 210 215 220
 Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
 225 230 235 240
 Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
 245 250 255
 Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
 260 265 270
 Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
 275 280 285
 Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
 290 295

<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

gtgcacgacc ccactgaatc atcccacaac catggatggg agacacactc agtctccttt
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 aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
 120
 agccatcagg ggcagnctg ctattcaggt ctgggactgt gggactccag agcccatgtt
 180
 ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
 240
 tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattt tggaggatct
 300
 tccccattc tctgtaccc tctcttggag ctcccagttc catctgagaa attatctact
 360
 ctgagaaatc gtcacaacac agcatggttg tgagtgcagt ggcagaagcc tgtgcctggg
 420
 tgtatggg
 428

<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
 1 5 10 15
 Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

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<210> 5631
<211> 783
<212> DNA
<213> Homo sapiens
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<210> 5632
<211> 183
<212> PRT
<213> Homo sapiens
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4812

1	5	10	15
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20	25	30	
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val			
35	40	45	
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg			
50	55	60	
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Thr Ser Ser Ser			
65	70	75	80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro			
85	90	95	
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys			
100	105	110	
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr			
115	120	125	
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser			
130	135	140	
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser			
145	150	155	160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln			
165	170	175	
Glu Arg Thr His Thr Thr Val			
180			

<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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tgtcacctcc gtgtcccaca tagatgccag gctctgcttc tgtggttctg gaggtcatta
120
gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
180
tgagcgggtt ctgagtgtg gggccgctgg tctgctctgc ctggtgggat tctccagtgc
240
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<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
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Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
      145          150          155          160
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      165          170          175
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Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

<400> 5637

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<210> 5638

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<212> PRT

<213> Homo sapiens

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<211> 2433

<212> DNA

<213> Homo sapiens

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<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

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Ala	Glu	Arg	Leu	Lys	Glu	Glu	Ile	Leu	Asn	Arg	Glu	Lys	Met	Val	Asp
Ile	Leu	Ala	Gly	Pro	Asp	Ala	Tyr	Arg	Asp	Leu	Pro	Arg	Leu	Leu	Ala
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Lys	Asp	Asp	Val	Pro	Glu	Glu	Val	Lys	Leu	Arg	Arg	Leu	Glu	Glu	Leu
Ile	Thr	Ile	Phe	Arg	Glu	Glu	Ala	Thr	Lys	Ala	Asn	Gln	Thr	Ser	Val
Gly	Cys	Thr	Gln	Leu	Val	Leu	Val	Glu	Gly	Leu	Ser	Lys	Arg	Ser	Ala
Thr	Asp	Leu	Cys	Gly	Arg	Asn	Asp	Gly	Asn	Leu	Lys	Val	Ile	Phe	Pro
Asp	Ala	Glu	Met	Glu	Asp	Val	Asn	Asn	Pro	Gly	Leu	Arg	Val	Arg	Ala
Gln	Pro	Gly	Asp	Tyr	Val	Leu	Val	Lys	Ile	Thr	Xaa	Gln	Pro	Val	Leu

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<213> Homo sapiens

<400> 5644

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			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35					40					45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70				75				80		
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
			85					90					95		
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile


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      100      105      110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
      115      120      125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
      130      135      140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
145      150      155      160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
      165      170      175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
      180      185      190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
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<210> 5645

<211> 156

<212> DNA

<213> Homo sapiens

<400> 5645

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<210> 5646

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5646

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Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
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Val Tyr His Ala
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<210> 5647

<211> 150

<212> DNA

<213> Homo sapiens

<400> 5647

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aagggagaac ccggcttacc cggccatccn
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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

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 20 25 30
 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
 35 40 45
 His Pro
 50

<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

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 120
 gacccgagtc tccggcgag cgcggggcgc ttgctccgct cgcaggtcat ccacagcggg
 180
 cacttcattg tgcgtcgcc gcacagcgac tcgctgcccc ggcggcgcga ccaggagggt
 240
 ccgtggggcc ctccgacttc gggcgcgca gtatcgaccc cacactcaca cgctcttcg
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 345

<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

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 Ala Arg Ala Ala Cys Ser Ala Arg Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
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 Gly Val Ser Gln

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<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

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 ctcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat
 180
 gctagcttgc taggaatgag agtaacaat gtttatgatg tggataataa gacatacctt
 240
 attcgtcttc aaaaaccgga ctttaaagct acacttttac ttgaatctgg catacaaatt
 300
 catacaacag aatttgagtg gcctaagaat atgatgccgt ctagttttgc catgaagtgc
 360
 cgaaaacatt tgaagatcg gagattagtc agtgcaaac agcttggtgt ggatagaatt
 420
 gtagattttc aatttggaag tgatgaagct gcttaccatt taatcattga gctctatgat
 480
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aaggtttcga
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 600
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<210> 5652
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 5652
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 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
 100 105 110
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

130	135	140
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Ala Glu Pro		160

<210> 5653

<211> 1439

<212> DNA

<213> Homo sapiens

<400> 5653

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120
gttcaggtg aacttgccag tgctcgtgtc ataatctccc tgcgggttg tgaggaccgc
180
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240
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300
ccagaaaccg cccacctgca ggtgaggccc ggaccctgc ccagttcctt ctccgggatg
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660
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1140
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accagatgga cttctcctcc agggagccca cctgaccca ccccaactgc acccctccc
1260

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 1320
 cacttaacca atgccttctg gtactgccat tctttttttt ttttttcaag tattggaagg
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 1439

<210> 5654
 <211> 245
 <212> PRT
 <213> Homo sapiens

<400> 5654
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 Tyr Gly Ile Pro Gly Met Pro Gly Leu Pro Gly Ala Pro Gly Lys Asp
 35 40 45
 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala
 50 55 60
 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu
 65 70 75 80
 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro
 85 90 95
 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
 100 105 110
 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr
 115 120 125
 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu
 130 135 140
 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys
 145 150 155 160
 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala
 165 170 175
 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe
 180 185 190
 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu
 195 200 205
 Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu Ala Val Asn Asp Tyr
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 Tyr Asp Met Val Gly Ile Gln Gly Ser Asp Ser Val Phe Ser Gly Phe
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<210> 5655
 <211> 3810
 <212> DNA
 <213> Homo sapiens

<400> 5655
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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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			20					25					30		
Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
		35					40					45			
Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
	50				55					60					
Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
65				70					75					80	
Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
			85					90					95		
Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
		100					105					110			
Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
	115					120					125				
Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
	130					135					140				
Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
145				150					155					160	
Leu	Ala	Ala	Gln	Asp	Arg	Val	Leu	Cys	Ala	Leu	Thr	Glu	Ala	Asn	Val
		165						170						175	
Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
	180						185					190			
Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
	195					200					205				
Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
	210				215						220				
Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

225 230 235 240
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 245 250 255
 Pro Pro Pro Arg Pro Thr Ala Pro Lys Pro Leu Leu Pro Arg Arg Glu
 260 265 270
 Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
 275 280 285
 Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
 290 295 300
 Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
 305 310 315 320
 Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
 325 330 335
 Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
 340 345 350
 Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
 355 360 365
 Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
 370 375 380
 Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
 385 390 395 400
 Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
 405 410 415
 Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
 420 425 430
 Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
 435 440 445
 Pro Cys Phe Pro Val Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
 450 455 460
 Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
 465 470 475 480
 Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
 485 490 495
 Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
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 Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
 515 520 525
 Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
 530 535 540
 Pro Gly Val Leu Gly Gln Pro Pro Pro Leu His Thr Gln Leu Tyr
 545 550 555 560
 Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
 565 570 575
 Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
 580 585 590
 Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
 595 600 605
 Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
 610 615 620
 Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
 625 630 635 640
 Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala
 645 650 655
 Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

660 665 670
 Gln Ser Pro Gly Gly Gly Gln Pro Leu Leu Gln Pro Thr Lys Val Asp
 675 680 685
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp
 690 695 700
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu
 705 710 715 720
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp
 725 730 735
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile
 740 745 750
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met
 755 760 765
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr
 770 775 780
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu
 785 790 795 800
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu
 805 810 815
 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu
 820 825 830
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg
 835 840 845
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val
 850 855 860
 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg
 865 870 875 880
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp
 885 890 895
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile
 900 905 910
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro
 915 920 925
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala
 930 935 940
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro
 945 950 955 960
 Glu Leu Pro Gln Leu Val Arg Arg Met Arg Gln Gln Arg Lys His Met
 965 970 975
 Leu Gln Glu Lys Leu His Leu Arg Xaa Leu Leu
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<210> 5657

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 5657

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<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

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Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu						
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Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu						
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Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser						
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Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala						
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Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg						
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Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg						
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Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp						
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Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val						
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Lys Leu Gln Ala Glu Lys Ser Arg Pro Val Met Gln Ala						
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<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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<210> 5660

<211> 253

<212> PRT

<213> Homo sapiens

<400> 5660

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 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
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<210> 5661

<211> 578

<212> DNA

<213> Homo sapiens

<400> 5661

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ataaccagtg gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccc

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caccaggac ctgacgggca cttagacaca cacagtggcc tgagctcaa ctccagcatg

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<210> 5662

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5662

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20

25

30

Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala

35

40

45

Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr

50

55

60

His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln

65

70

75

80

Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu

85

90

95

Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe

100

105

110

Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg

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120

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135

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Ser Asp Met Leu

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<210> 5663

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5663

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120

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360

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420

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480

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540

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660

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720

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<210> 5664

<211> 203

<212> PRT

<213> Homo sapiens

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10

15

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20

25

30

Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu

35

40

45

Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp

50

55

60

Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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Pro	Glu	Leu	Ile	Lys	Glu	Ser	Asn	Ala	Asn	Pro	Ile	Phe	Met	Arg	Lys
		85		90		95									
Asp	Thr	Lys	Met	Ser	Phe	Gln	Trp	Arg	Ile	Arg	Asn	Leu	Pro	Tyr	Pro
		100		105		110									
Lys	Asp	Val	Tyr	Ser	Val	Ser	Val	Asp	Gln	Lys	Glu	Arg	Cys	Ile	Ile
		115		120		125									
Val	Arg	Thr	Thr	Asn	Lys	Lys	Tyr	Tyr	Lys	Lys	Phe	Ser	Ile	Pro	Asp
		130		135		140									
Leu	Asp	Arg	His	Gln	Leu	Pro	Leu	Asp	Asp	Ala	Leu	Leu	Ser	Phe	Ala
		145		150		155									
His	Ala	Asn	Cys	Thr	Leu	Ile	Ile	Ser	Tyr	Gln	Lys	Pro	Lys	Glu	Val
		165		170		175									
Val	Val	Ala	Glu	Ser	Glu	Leu	Gln	Lys	Glu	Leu	Lys	Lys	Val	Lys	Thr
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<210> 5665

<211> 531

<212> DNA

<213> Homo sapiens

<400> 5665

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<210> 5666

<211> 79

<212> PRT

<213> Homo sapiens

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Leu	Gln	Gln	Gln	Tyr	Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys
		20					25					30			
Glu	Arg	Arg	Pro	Val	Glu	Gln	Val	Leu	Tyr	His	Gly	Thr	Thr	Ala	Pro

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 Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
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<210> 5667

<211> 858

<212> DNA

<213> Homo sapiens

<400> 5667

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<210> 5668

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5668

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 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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Lys	Glu	Ile	Arg	Gln	Val	Val
	50		55		60	
Ala	Met	Met	Phe	Arg	Gln	Arg
65			70		75	
Asn	Met	Leu	Asp	Val	Gln	Gly
			85		90	
Ser	Ser	Leu	Leu	Asn	Ala	Lys
			100		105	
Arg	Lys	Val	Lys	Gln	Tyr	Leu
			115		120	
Glu	Lys	Phe	Gln	Met	Met	Ser
			130		135	
Cys	Glu	Tyr	Lys	Phe	Ser	Phe
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<210> 5669

<211> 1842

<212> DNA

<213> Homo sapiens

<400> 5669

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960

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<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

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			20						25					30	
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
			35						40					45	
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
			50						55					60	
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
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His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
					85					90					95
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
					100					105					110
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
					115					120					125
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

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Gly Pro Leu Gly Phe Asn Ile Pro Tyr Glu Phe Thr Asp Gly Asp Leu				
	165		170	175
Arg Ile Cys Ile Ser Gln Leu Lys Met Phe Leu Asp Glu Tyr Asp Asp				
	180		185	190
Ile Pro Tyr Lys Val Leu Lys Tyr Thr Ala Gly Glu Ile Asn Tyr Gly				
	195		200	205
Gly Arg Val Thr Asp Asp Trp Asp Arg Arg Cys Ile Met Asn Ile Leu				
	210		215	220
Glu Asp Phe Tyr Asn Pro Asp Val Leu Ser Pro Glu His Ser Tyr Ser				
225		230		235
Ala Ser Gly Ile Tyr His Gln Ile Pro Pro Thr Tyr Asp Leu His Gly				
	245		250	255
Tyr Leu Ser Tyr Ile Lys Ser Leu Pro Leu Asn Asp Met Pro Glu Ile				
	260		265	270
Phe Gly Leu His Asp Asn Ala Asn Ile Thr Phe Ala Gln Asn Glu Thr				
	275		280	285
Phe Ala Leu Leu Gly Thr Ile Ile Gln Leu Gln Pro Lys Ser Ser Ser				
	290		295	300
Ala Gly Ser Gln Gly Arg Glu Glu Ile Val Glu Asp Val Thr Gln Asn				
305		310		315
Ile Leu Leu Lys Val Pro Glu Pro Ile Asn Leu Gln Trp Val Met Ala				
	325		330	335
Lys Tyr Pro Val Leu Tyr Glu Glu Ser Met Asn Thr Val Leu Val Gln				
	340		345	350
Glu Val Ile Arg Tyr Asn Arg Leu Leu Gln Val Ile Thr Gln Thr Leu				
	355		360	365
Gln Asp Leu Leu Lys Ala Leu Lys Gly Leu Val Val Met Ser Ser Gln				
	370		375	380
Leu Glu Leu Met Ala Ala Ser Leu Tyr Asn Asn Thr Val Pro Glu Leu				
385		390		395
Trp Ser Ala Lys Ala Tyr Pro Ser Leu Lys Pro Leu Ser Ser Trp Val				
	405		410	415
Met Asp Leu Leu Gln Arg Leu Asp Phe Leu Gln Ala Trp Ile Gln Asp				
	420		425	430
Gly Ile Pro Ala Val Phe Trp Ile Ser Gly Phe Phe Phe Pro Gln Ala				
	435		440	445
Phe Leu Thr Gly Thr Leu Gln Asn Phe Ala Arg Lys Phe Val Ile Ser				
	450		455	460
Ile Asp Thr Ile Ser Phe Asp Phe Lys Val Met Phe Glu Ala Pro Ser				
465		470		475
Glu Leu Thr Gln Arg Pro Gln Val Gly Cys Tyr Ile His Gly Leu Phe				
	485		490	495
Leu Glu Gly Ala Arg Trp Asp Pro Glu Ala Phe Gln Leu Ala Glu Ser				
	500		505	510
Gln Pro Lys Glu Leu Tyr Thr Glu Met Ala Val Ile Trp Leu Leu Pro				
	515		520	525
Thr Pro Asn Arg Lys Ala Gln Asp Gln Asp Phe Tyr Leu Cys Pro Ile				
	530		535	540
Tyr Lys Thr Leu Thr Arg Ala Gly Thr Leu Ser Thr Thr Gly His Ser				
545		550		555
Thr Asn Tyr Val Ile Ala Val Glu Ile Pro Thr His Gln Pro Gln Arg				

Thr	Ser	Val	Tyr	His	Thr	Pro	Leu	Asn	Leu	Asn	Val	Arg	Thr	Phe	Pro
65					70					75					80

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<210> 5673
<211> 1279
<212> DNA
<213> Homo sapiens
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<400> 5673
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120
ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag
180
tgagctgggc tctaacttca ctcaaaaatt tatagtacag ctaagaaggc cagtctgtcc
240
atgaaaggga gccgagacaa gacgaggggc gcctcttcca ggctgtgcc aagtgtcctt
300
ggggtccgc catgggtccac acttctgcag catccgcaga acatgtggcc gggctcctgc
360
cagcagcagg gacagccaag tgggaggcag gcatggtgca cacctgggga ggccccgg
420
gcagaagcag cccacagta gcagcccat ccagaggaag accactcgg agggccacag
480
gcctctgcag ccctggcact gccgccagc cctccatctc agcgggatgt gcagggtgag
540
acaggaatgc agggacgttc tgcccctagg tcagcctctt catccgctg ttgtgcttcg
600
atggtcaagg ttgccctgtc cacagctgct gcaacgccat ccagggett cttctgtctc
660
tccagctcac tctggcctc cgggccagc ccttcactc cctcaggatc tgggttagtt
720
cctgggtatc tgctcagaa agggctggca ggcttgtctg cagggtgcagt gctgtgccct
780
cttgggtctc tgcggtggc tcacggtgca gggtacggc catcagccca gatgctgc
840

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gccagactga gcagctcttc tctgcggggg aagaggttct tgcgcttctg agcaccaatg
 900
 catctttctaa cagctccatc ttcttgctga actgcacttc taaaatgggg ataacctctg
 960
 gcatcttggc agatatcaaa cgataggcca tgtctggctt tccaataaac cgctggcgga
 1020
 tgctaatttc gtaaggtgag tggaccttga tgcgtccac gtcttctctt tcaaacctgt
 1080
 gcatgagcaa agaactggag tcatgtattt ccaaccaga cacaaggacg gtgagcctcc
 1140
 ctggtttaac gtgagactct gttctgtggg aaataacagc aggaattttt atcagtatcc
 1200
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 1260
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 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
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Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25				30			
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
		35					40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55				60					
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75				80	
Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 120
 gggctgggcc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc
 180
 cgggtgaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg
 240
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctctta cctccttcaa
 300
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga
 360

gtggtctcta ggcccagggc cccaaggaga gggctgggtt tctgggagag tgctggctct
 420
 tcctctctgg gcttggccat cttgacagct tcatcgtagg aggggtggagg ctccgggggtg
 480
 tacaggctgt aggcaggagg agccgtggag tccaggtcca gctcccaaaa gggcaggggc
 540
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgt gtgtacaggg
 600
 ctgtcactgt ccatagggat gactgccacg tgcagggct gccgtgctgg tggcagatgt
 660
 ggctgggcct gtgcctgctt ccggaggcag cagaaccgga cacaaccagc tgtgacacca
 720
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact
 780
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 840
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 900
 agagcctggc ctcgggctgc tgggcctgcc ctggctatct ctctgggct ggccaggggt
 960
 ggcttgggc tcactcccag gactcgctgt cctcagcgag tgcccactg ctgagcggga
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 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu Val Thr Val Leu Cys Thr Gly Leu Ser Leu Ser Ile Gly Met Thr
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 Ala Thr Ser Gln Gly Cys Arg Ala Gly Gly Arg Cys Gly Trp Ala Cys
 20 25 30
 Ala Cys Phe Arg Arg Gln Gln Asn Arg Thr Gln Pro Ala Val Thr Pro
 35 40 45
 His Ser Arg Ser Arg Arg Thr Ala Ser Arg Met Ser Leu Gly Glu Gln
 50 55 60
 Gly Ser Thr Thr Gly Leu Thr Leu Gly His Arg Ala Pro Ala Pro Trp
 65 70 75 80
 Gly Met Ser Trp His Asn His Arg Arg Gln Val Asn Arg Ile Lys Ser
 85 90 95
 Arg Gln Cys Leu Ser Met Ser Glu Thr Ala Val Ala Arg Ala Trp Pro
 100 105 110
 Arg Ala Ala Gly Pro Ala Leu Ala Ile Ser Pro Gly Leu Ala Arg Gly
 115 120 125
 Gly Leu Gly Leu Thr Pro Arg Thr Arg Cys Pro Gln Arg Val Pro His
 130 135 140
 Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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 120
 agggaaagca agatgcagca gtgaggccct ctctggatc cattcattca cttcactcaa
 180
 cagctgttta tgacctgag caatacaagc cttgtgaaga tcctggagca gggcacaagc
 240
 cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca
 300
 gccgcccgtg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
 360
 ccagctggag aagaccacca atgctgagat gagggagggtg ctggctgagc tgctggagct
 420
 aggggtgtcct gacgagagcc tgagcgacgc catcacctg gacctcttct gccgcgg
 477

<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

Met	Ala	Ser	Leu	Arg	Leu	Cys	Ser	Gly	His	Pro	Ser	Ser	Ser	Ser	Ser
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Ala	Ser	Thr	Ser	Leu	Ile	Ser	Ala	Leu	Val	Val	Phe	Ser	Ser	Trp	Cys
		20					25					30			
Met	Glu	Trp	Thr	Ser	Arg	Tyr	Phe	His	Met	Gln	Ile	Arg	Gly	Arg	Gly
	35					40					45				
Ser	Gly	Gly	Cys	Gly	Lys	Lys	Ala	Asn	Trp	Gly	Arg	Gln	Gln	Gly	Phe
	50				55				60						
Ser	Leu	Glu	Gln	Thr	Ser	Ala	Ala	Cys	Ala	Leu	Leu	Gln	Asp	Leu	His
	65			70				75					80		
Lys	Ala	Cys	Ile	Ala	His	Gly	His	Lys	Gln	Leu	Leu	Ser	Glu	Val	Asn
		85				90						95			
Glu	Trp	Ile	Pro	Glu	Arg	Ala	Ser	Leu	Leu	His	Leu	Ala	Phe	Pro	Thr
	100					105					110				
Ser	Asn	Pro	Leu	Gly	Gln	Arg	Gly	Gly	Val	Leu	Pro	Leu	Leu	His	Gln
	115				120						125				
Cys	Pro	Phe	Leu	Pro	Trp	Ser	Gln	Ala	Ala	Ser	Phe	Gln	His	Arg	Pro
	130				135						140				
Leu	Gln	Arg	Gly	Thr	Ala	Ala									
145					150										

<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

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 120
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
 180
 ccacagcagc ctagtctga atccacacca cagcagccta gccctgaatc cacaccacag
 240
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccggaa
 300
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 360
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 420
 gccctcgga ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa
 480
 tccttgtaaa caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagtgt
 540
 ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
 600
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 660
 aaaaa
 665

<210> 5680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5680

Val Gly Arg Ile Tyr His Glu Glu Gly Gln Glu Glu Lys Val Arg Gly
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 20 25 30
 Ser Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln Gln Pro Ser Pro Glu
 35 40 45
 Ser Thr Pro Gln Gln Pro Ser Pro Glu Ser Thr Pro Gln His Ser Ser
 50 55 60
 Leu Glu Thr Thr Ser Arg Gln Pro Ala Phe Gln Ala Leu Pro Ala Pro
 65 70 75 80
 Glu Ile Arg Arg Ser Ser Cys Cys Leu Leu Ser Pro Asp Ala Asn Val
 85 90 95
 Lys Ala Ala Pro Gln Ser Arg Lys Ala Glu Asn Leu Gln Glu Asn Pro
 100 105 110
 Pro Val Ile Val Thr Arg Val Leu Gln Ala Leu Gly Thr Val Ala Val
 115 120 125
 Ala Leu Gly Ala Leu Gly Ala Ala Tyr Tyr Ile Thr Glu Ser Leu
 130 135 140

<210> 5681

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5681

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gtcgggacct ggtttccggg catgagctga gagcaccacg ccgaggccac gagtatttca
120
tagacattga tggaagcaga aacaaaaact cttcccctgg agaatgcac catcctttca
180
gagggctctc tgcaggaagg acaccgatta tggattggca acctggacce caaaattacc
240
gaataccacc tctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc
300
ttccacaagt cagggtgctt ggagggacag cctcgaggct actgttttgt taactttgaa
360
actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag
420
aagctggtgg tgcgatggc acatgctcaa gtaaagagat atgatcataa caagaatgat
480
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540
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600
gatgcagagt atccagcagc gctgtttat tctacttta agccaccaga taaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttggt aattactgta
720
gcagcaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
gaatggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
840
gatgttctta tggatgttct ttcctaatac tatgtatgga attgagcatc atccagaata
900
aatagcgttg tatcccaaat tgtgatttga accctgggat gctctaattg gctggttggc
960
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1020
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1080
tacgtcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag
1140
acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa
1200
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1260
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1320
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1380
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1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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 20 25 30
 Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
 35 40 45
 Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50 55 60
 Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65 70 75 80
 Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
 85 90 95
 Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
 100 105 110
 His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
 115 120 125
 Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
 130 135 140
 Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
 145 150 155 160
 Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
 165 170 175
 Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
 180 185 190

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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 120
 atgctttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
 180
 tgctgctttc tgggttaaag tagggaaata cagtgttcca gggcatagga atggtgctct
 240
 gggtagaaaa gtttattttg ctggtgggag gcagggtttg ttaataaagc tttgaaatac
 300
 acaaatttca ttctggatgc tgatgctg
 328

<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

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      1             5             10             15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685

<211> 604

<212> DNA

<213> Homo sapiens

<400> 5685

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120
gagcggcagg agtggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
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gttgcgggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
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480
caacatggca tctctcgagc agaggccatg ggccagtggg tgccgggctgc catcccccga
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atcc
604

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<210> 5686

<211> 69

<212> PRT

<213> Homo sapiens

<400> 5686

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Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
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Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

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35 40 45
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
 50 55 60
 Pro Ser Gln Arg Pro
 65

<210> 5687
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 5687
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 ccccggtctt gcatgcacgc ctgcgtgaac accccgggct cttcccggtg cacctgcccc
 120
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
 180
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt
 240
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 300
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 328

<210> 5688
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5688
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 20 25 30
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
 35 40 45
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
 50 55 60
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
 65 70 75 80
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
 85 90 95
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
 100 105

<210> 5689
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 5689
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120
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
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300
aacactgaga cccagggtct aaaggcagac tcctcagggt cccgggaagg gagcctttcc
360
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtctc gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttctttgg cccccgacg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
600
agtagtaatc ccatggatgg catggacaat aggacagtgt ggggaagtat gagacacct
660
cctgaacaga caaatgggtg gcatacccca cctcagtggt ccagtgcctc tgcagggggc
720
gtctccccag gtgcctcgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc
780
ccctcgccct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tcctgggagc
840
cagagtttga gcagtggaga aacagtgcct atccctcgcc cagggcctgc ccaaggagat
900
ggacattcct tacctcccat tgctcgccgc ctgggccacc accctccaca gtccctaaat
960
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1140
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1260
atttgggaatt ttccagtgtg taagcatttg gactgagaat tgggaaaaca aaattactcc
1320
cagaagccaa aactctttta ttcccaaccg aagtcactcc aggtctggat caaatctcca
1380
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1440
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1680

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 1740
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 1860
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 1897

<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

Thr	Ile	Arg	Ile	Ile	Glu	Glu	Cys	Glu	His	Trp	Ser	Phe	Val	Phe	Gln
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Val	Gly	Gln	Cys	Val	Val	Val	Phe	Ser	Gln	Ala	Pro	Ser	Gly	Arg	Ala
		20					25				30				
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
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<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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 360
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 420
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 480
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 540
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 600
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 1080
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 1200
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 1227

<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

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Ala	Glu	Met	Tyr	Asn	Arg	Pro	Val	Glu	Val	Tyr	Gln	Tyr	Ser	Thr	Glu
			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
		35				40					45				
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
	50				55					60					
Asn	Lys	Ala	Thr	Ile	Gly	Val	Gly	Leu	Gly	Cys	His	His	Ser	Asn	Gln
65				70				75						80	
Gly	Leu	Gln	Ser	Ser	Leu										
				85											

<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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389

<210> 5694

<211> 60

<212> PRT

<213> Homo sapiens

<400> 5694

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Met	Ser	Arg	Leu	Gly	Ile	Trp	Gly	Glu	Gly	Thr	Pro	Phe	Arg	Phe
		20					25				30			
Glu	Glu	Phe	Leu	His	Ala	Ile	Glu	Lys	Arg	Gly	Val	Gly	Ala	Met
	35					40					45			
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<210> 5695

<211> 1417

<212> DNA

<213> Homo sapiens

<400> 5695

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300
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<210> 5696

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Glu	Glu	Ala	Gly	Ala	Leu	Arg	Gln	Ala	Leu	Thr	Phe	Ser	Leu	Leu	Glu
			20					25					30		
Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
		35					40					45			
Lys	Ala	Gln	Leu	Val	Val	His	Ser	Ala	Phe	Glu	Gln	Asp	Val	Glu	Glu
	50					55				60					
Leu	Asp	Arg	Ala	Leu	Arg	Ala	Ala	Leu	Glu	Val	His	Val	Gln	Glu	Glu
65					70					75				80	
Thr	Val	Gly	Pro	Trp	Arg	Arg	Thr	Leu	Pro	Ala	Glu	Leu	Arg	Ala	Arg
			85					90						95	
Leu	Glu	Arg	Cys	His	Gly	Val	Ser	Val	Ala	Leu	Arg	Gly	Asp	Cys	Thr
			100					105					110		
Ile	Leu	Arg	Gly	Phe	Gly	Ala	His	Pro	Ala	Arg	Ala	Ala	Arg	His	Leu
	115						120						125		
Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
	130					135					140				
Ala	Ala	Ser	Gly	Pro	Thr	Leu	Ala	Gly	Gln	Thr	Leu	Lys	Gly	Pro	Trp
145					150					155				160	
Asn	Asn	Leu	Glu	Arg	Leu	Ala	Glu	Asn	Thr	Gly	Glu	Phe	Gln	Glu	Val
			165					170						175	
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
			180					185					190		
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
	195						200						205		
Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
225	230	235
Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
	325	330
Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
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<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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<210> 5698

<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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Phe	Leu	Leu	Leu	Phe	Val	Ile	Thr	Ser	Val	Ala	Ser	Glu	Asn	Ala	Ser
			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
			35				40					45			
Cys	Asp	Leu	Asp	Ala	Ile	Trp	Gly	Ile	Val	Val	Glu	Ala	Val	Ala	Gly
			50				55				60				
Ala	Gly	Ala	Leu	Ile	Thr	Leu	Leu	Leu	Met	Leu	Ile	Leu	Leu	Val	Arg
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Leu	Pro	Phe	Ile	Lys	Glu	Lys	Glu	Lys	Lys	Ser	Pro	Val	Gly	Leu	His
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Phe	Leu	Phe	Leu	Leu	Gly	Thr	Leu	Gly	Leu	Phe	Gly	Leu	Thr	Phe	Ala
			100					105					110		
Phe	Ile	Ile	Gln	Glu	Asp	Glu	Thr	Ile	Cys	Ser	Val	Arg	Arg	Phe	Leu
			115				120					125			
Trp	Gly	Val	Leu	Phe	Ala	Leu	Cys	Phe	Ser	Cys	Leu	Leu	Ser	Gln	Ala

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Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile		160
	165	170
Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala		175
	180	185
Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met		190
	195	200
Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly		205
	210	215
Lys Phe Lys Arg Trp Lys Leu Asn Gly Ala Phe Leu Leu Ile Thr Ala		220
225	230	235
Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe		240
	245	250
Gly Asn Val Lys Leu Gln Gln Gly Asp Ala Trp Asn Asp Pro Thr Leu		255
	260	265
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala		270
	275	280
Ile Pro Glu Ile His Cys Thr Leu Leu Pro Ala Leu Gln Glu Asn Thr		285
	290	295
Pro Asn Tyr Phe Asp Thr Ser Gln Pro Arg Met Arg Glu Thr Ala Phe		300
305	310	315
Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe		320
	325	330
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn		335
	340	345
Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser		350
	355	360
Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val		365
	370	375
Leu Asn Gly Gly Thr Ile Pro Thr Ala Pro Pro Ser His Thr Gly Arg		380
385	390	395
His Leu Trp		400

<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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120

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180

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240

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300

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe		
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Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe		
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<210> 5701

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5701

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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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			20					25				30			
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Leu	Pro	Ser	Ala	Arg	Ala	Lys	Ile	Arg	Ile	Thr	Ser	Ser	Pro	Ile	Phe

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Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
          130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
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Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
          165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
          180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
          195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
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Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
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Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
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Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
          260          265          270
Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
          275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
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Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<212> PRT

<213> Homo sapiens

<400> 5704

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<212> DNA
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<211> 202

<212> PRT

<213> Homo sapiens

<400> 5706

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			20					25					30		
Gly	Trp	Glu	Glu	Ala	Arg	Asp	Phe	Asp	Gly	Lys	Val	Tyr	Tyr	Ile	Asp
		35					40						45		
His	Thr	Asn	Arg	Thr	Thr	Ser	Trp	Ile	Asp	Pro	Arg	Asp	Arg	Tyr	Thr
	50					55					60				
Lys	Pro	Leu	Thr	Phe	Ala	Asp	Cys	Ile	Ser	Asp	Glu	Leu	Pro	Leu	Gly
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Trp	Glu	Glu	Ala	Tyr	Asp	Pro	Gln	Val	Gly	Asp	Tyr	Phe	Ile	Asp	His
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Asn	Thr	Lys	Thr	Thr	Gln	Ile	Glu	Asp	Pro	Arg	Val	Gln	Trp	Arg	Arg
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Glu	Gln	Glu	His	Met	Leu	Lys	Asp	Tyr	Leu	Val	Val	Ala	Gln	Glu	Ala
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Leu	Ala	Gln	Gln	Glu	Tyr	Gln	Gln	Leu	His	Ala	Val	Trp	Glu	His	Lys
145					150					155					160
Leu	Gly	Ser	Gln	Val	Ser	Leu	Val	Ser	Gly	Ser	Ser	Ser	Ser	Ser	Lys
			165						170					175	
Tyr	Asp	Pro	Glu	Ile	Leu	Lys	Ala	Glu	Ile	Ala	Thr	Ala	Val	Gln	Arg
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<212> DNA

<213> Homo sapiens

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<210> 5708

<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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Glu	Val	Thr	Glu	Glu	Asn	Val	Gln	Val	Leu	Leu	Pro	Ala	Ala	Ser	Leu
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Leu	Gln	Leu	Met	Asp	Val	Arg	Gln	Asn	Cys	Cys	Asp	Phe	Leu	Gln	Ser
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His	Phe	Pro	Glu	Val	Met	Leu	Gly	Glu	Glu	Phe	Leu	Ser	Leu	Ser	Leu
			100					105					110		
Asp	Gln	Val	Cys	Ser	Leu	Ile	Ser	Ser	Asp	Lys	Leu	Thr	Val	Ser	Ser
			115					120					125		
Glu	Glu	Lys	Val	Phe	Glu	Ala	Val	Ile	Ser	Trp	Ile	Asn	Tyr	Glu	Lys
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Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala
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Leu	Ile	Lys	Asn	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met
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			210				215					220			
Val	Gly	Gly	Gln	Ala	Pro	Lys	Ala	Ile	Arg	Ser	Val	Glu	Cys	Tyr	Asp
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Phe	Glu	Glu	Asp	Arg	Trp	Asp	Gln	Ile	Ala	Glu	Leu	Pro	Ser	Arg	Arg
				245					250					255	
Cys	Arg	Ala	Gly	Val	Val	Phe	Met	Ala	Gly	His	Val	Tyr	Ala	Val	Gly
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Gly	Phe	Asn	Gly	Ser	Leu	Arg	Val	Arg	Thr	Val	Asp	Val	Tyr	Asp	Gly
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Val	Lys	Asp	Gln	Trp	Thr	Ser	Ile	Ala	Ser	Met	Gln	Glu	Arg	Arg	Ser
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<210> 5709
<211> 1805
<212> DNA
<213> Homo sapiens
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<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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			20				25					30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
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	85		90		95
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr					
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Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu					
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Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met					
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Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn					
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Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu					
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Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly					
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Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser					
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Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val					
	275		280		285
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Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr					
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Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg					
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Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser					
	355		360		365
Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val					
	370		375		380
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro					
	385		390		395
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His					
	405		410		415
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

<400> 5711

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<211> 145

<212> PRT

<213> Homo sapiens

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		20						25					30		
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40						45		

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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
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 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

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<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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<212> DNA
<213> Homo sapiens
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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln					
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Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr					
65	70	75	80		
Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu					
85	90	95			
Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu					
100	105	110			
Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His					
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55					60				
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
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Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
	115						120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135					140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
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			165					170					175		
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
		180						185				190			
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
	195						200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
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Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

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			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
	35					40						45			
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65				70					75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90					95		
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
	100						105						110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115					120					125				
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

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145	150	155
His Tyr Ala Arg Thr	Ser Leu Glu Asp Glu	Val Phe Glu Gln Lys
165	170	175
His Val Lys Lys Pro	Glu Gly Leu Phe Arg	Asn Arg Phe Glu Val Arg
180	185	190
Asn Ala Val Lys Leu	Leu Gln Ala Ala Asp	Ser Phe Lys Asp Gln Thr
195	200	205
Phe Phe Leu Ser Gln	Val Ser Gln Asp Ala	Leu Arg Arg Thr Ile Phe
210	215	220
Pro Leu Gly Gly Leu	Thr Lys Glu Phe Val	Lys Lys Ile Ala Ala Glu
225	230	235
Asn Arg Leu His His	Val Leu Gln Lys Lys	Glu Ser Met Gly Met Cys
245	250	255
Phe Ile Gly Lys Arg	Asn Phe Glu His Phe	Leu Leu Gln Tyr Leu Gln
260	265	270
Pro Arg Pro Gly His	Phe Ile Ser Ile Glu	Asp Asn Lys Val Leu Gly
275	280	285
Thr His Lys Gly Trp	Phe Leu Tyr Thr Leu	Gly Gln Arg Ala Asn Ile
290	295	300
Gly Gly Leu Arg Glu	Pro Trp Tyr Val Val	Glu Lys Asp Ser Val Lys
305	310	315
Gly Asp Val Phe Val	Ala Pro Arg Thr Asp	His Pro Ala Leu Tyr Arg
325	330	335
Asp Leu Leu Arg Thr	Ser Arg Val His Trp	Ile Ala Glu Glu Pro Pro
340	345	350
Ala Ala Leu Val Arg	Asp Lys Met Met Glu	Cys His Phe Arg Phe Arg
355	360	365
His Gln Met Ala Leu	Val Pro Cys Val Leu	Thr Leu Asn Gln Asp Gly
370	375	380
Thr Val Trp Val Thr	Ala Val Gln Ala Val	Arg Ala Leu Ala Thr Gly
385	390	395
Gln Phe Ala Val Phe	Tyr Lys Gly Asp Glu	Cys Leu Gly Ser Gly Lys
405	410	415
Ile Leu Arg Leu Gly	Pro Ser Ala Tyr Thr	Leu Gln Lys Gly Gln Arg
420	425	430
Arg Ala Gly Met Ala	Thr Glu Ser Pro Ser	Asp Ser Pro Glu Asp Gly
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Pro Gly Leu Ser Pro	Leu Leu	
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<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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180

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 240
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 300
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<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

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			20					25				30			
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
		35				40					45				
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50				55						60				
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
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<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

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<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

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Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
	35	40	45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
	50	55	60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
	85	90	95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
	100	105	110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
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<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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960

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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly	35	40	45	
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val	50	55	60	
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe	65	70	75	80
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Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu	165	170	175	
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro	180	185	190	
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile	195	200	205	
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr	210	215	220	
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly	225	230	235	240
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys	245	250	255	
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Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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			20					25					30		
Lys	Tyr	Arg	Asp	Ile	Asp	Glu	Asp	Glu	Ile	Leu	Arg	Thr	Leu	Ser	Pro
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Glu	Glu	Leu	Glu	Gln	Leu	Asp	Cys	Glu	Leu	Gln	Glu	Met	Asp	Pro	Glu
	50					55				60					
Asn	Met	Leu	Leu	Pro	Ala	Gly	Leu	Arg	Gln	Arg	Asp	Gln	Thr	Lys	Lys
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Ser	Pro	Thr	Gly	Pro	Leu	Asp	Arg	Glu	Ala	Leu	Leu	Gln	Tyr	Leu	Glu
			85					90					95		
Gln	Gln	Ala	Leu	Glu	Val	Lys	Glu	Arg	Asp	Asp	Leu	Val	Pro	Phe	Thr
			100					105					110		
Gly	Glu	Lys	Lys	Gly	Lys	Pro	Tyr	Ile	Gln	Pro	Lys	Arg	Glu	Ile	Pro
		115					120					125			
Ala	Glu	Glu	Gln	Ile	Thr	Leu	Glu	Pro	Glu	Leu	Glu	Glu	Ala	Leu	Ala
	130					135					140				
His	Ala	Thr	Asp	Ala	Glu	Met	Cys	Asp	Ile	Ala	Ala	Ile	Leu	Asp	Met
145					150					155				160	
Tyr	Thr	Leu	Met	Ser	Asn	Lys	Gln	Tyr	Tyr	Asp	Ala	Leu	Cys	Ser	Gly
			165					170					175		
Glu	Ile	Cys	Asn	Thr	Glu	Gly	Ile	Ser	Ser	Val	Val	Gln	Pro	Asp	Lys
			180					185				190			
Tyr	Lys	Pro	Val	Pro	Asp	Glu	Pro	Pro	Asn	Pro	Thr	Asn	Ile	Glu	Glu
		195					200					205			
Ile	Leu	Lys	Arg	Val	Arg	Ser	Asn	Asp	Lys	Glu	Leu	Glu	Glu	Val	Asn
	210					215					220				
Leu	Asn	Asn	Ile	Gln	Asp	Ile	Pro	Ile	Pro	Met	Leu	Ser	Glu	Leu	Cys
225					230					235				240	
Glu	Ala	Met	Lys	Ala	Asn	Thr	Tyr	Val	Arg	Ser	Phe	Ser	Leu	Val	Ala
			245					250					255		
Thr	Arg	Ser	Gly	Asp	Pro	Ile	Ala	Asn	Ala	Val	Ala	Asp	Met	Leu	Arg
		260						265				270			
Glu	Asn	Arg	Ser	Leu	Gln	Ser	Leu	Asn	Ile	Glu	Ser	Asn	Phe	Ile	Ser
	275					280						285			
Ser	Thr	Gly	Leu	Met	Ala	Val	Leu	Lys	Ala	Val	Arg	Glu	Asn	Ala	Thr
	290					295					300				
Leu	Thr	Glu	Leu	Arg	Val	Asp	Asn	Gln	Arg	Gln	Trp	Pro	Gly	Asp	Ala
305					310					315				320	
Val	Glu	Met	Glu	Met	Ala	Thr	Val	Leu	Glu	Gln	Cys	Pro	Ser	Ile	Val
			325					330					335		
Arg	Phe	Gly	Tyr	His	Phe	Thr	Gln	Gln	Gly	Pro	Arg	Ala	Arg	Ala	Ala
		340						345				350			
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<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 120
 cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc
 180
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 240
 gggggccact cacctgcttg cgtctcaggc gtcctctctg gaccttcctc cgcaggaacc
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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20					25				30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
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Gly	Ser	Ser	Ser	Ala	Gly	Gly	Ser	Ser	Ala	Arg	Phe	Cys	Thr	Lys	Phe
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 120
 atttgtcag cacttgggaa cttcttgccc cagatgattg agaagaagcg gaaaaaagaa
 180
 aactctagaa gtctggatgt cgggtgggct ctgagatatg ccgtttacgg gttcttcttc
 240
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 300
 ccctggcag ggctcaggag gcttctctctg gaccgcctcg tctttgcacc ggccttcctc
 360
 atgttgttct tctcatcat gaactttctg gaggggaaag acgcctcagc ctteggcgcc
 420
 aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcgggtgtg gacgccacta
 480
 cagttcatca acatcaacta cgtccctctg aagttccggg tgctcttcgc caacctggca
 540
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 600

caggtgcact gtggacgtgg gtctgggggt ctcacccgcc cagcgagagc agaaccaatc
 660
 cagtcaggat gtcactgact ctaaatacagg tgattcaaga tgcccaaaaa tgatggatag
 720
 agaaacagaa atctctgaat gtcagaaccc tgtcttttaa aaaggcagtc actgccttca
 780
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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
	35					40					45				
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50					55					60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
				85				90						95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
		100					105						110		
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
	115						120					125			
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135						140			
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165				170							175	
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
		180					185						190		

Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 120

gtcagctata ctttctctt ctggctgcc ctgtacatca cgaatgtgga tcaccttgat
 180
 gccaaaaagg cggggtgcac aggtagcccc gacctctca ggcattccag ccacagaaca
 240
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 300
 aaaacaggac accagagccc accagacagt gccggccagc agagaagcag agagccagcg
 360
 ccacacaaca tcaagaaggc cgacaaccag gttggaacc aagacggagc tcagaccac
 420
 cacatcgccc cagaggcttt tccagcacc atgatgttcc ggactgacct aaaaactaat
 480
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 540
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 660
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 720
 cacacaccac acctgggact gtttttaata catagcaaca gactgggtta tttatttaag
 780
 atgtgtattg tgtcatatga agtttaagag acataaatgg cattttgtta tttattaaga
 840
 caaactccaa ttgttctctg gctgtttttt tcagttgtgt ctagcaaaat acttatctgc
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 950

<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

Xaa	His	Val	Val	Ile	Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Thr	Ala	Ala
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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25					30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
		50				55					60				
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
65					70				75					80	
Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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120
ccccttctcg ggagtgcgc aatgcctggg ccgacccaaa ccctgtcccc aaatggcgag
180
aacaacaacg acatcatcca ggataataac gggaccatca ttcctttccg gaagcacaca
240
gtgcgcgggg agcggttcta cagttgggga atggcggtca atgtgtattc tacctcgata
300
accaagaga ctatgagcag acatgacatc attgcatggg ttaatgacat agtatcttta
360
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420
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480
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540
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600
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660
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720
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780
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840
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1620

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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
		35					40					45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
	50					55					60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90					95	
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

	100		105		110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met					
115		120		125	
Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe					
130		135		140	
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala					
145		150		155	160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln					
	165		170		175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro					
	180		185		190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser					
	195		200		205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala					
	210		215		220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu					
225		230		235	240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu					
	245		250		255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu					
	260		265		270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp					
	275		280		285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu					
	290		295		300
Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln					
305		310		315	320
Pro Pro Gln Gln Glu Glu Tyr					
	325				

<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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120

tggctgaaca tcaggggcaa ggaggcggct gcccaatcca tgttccatgt ctccacgcca
180

ctgccagtga tgaccggtgg tttcctgatg tacctgagag ggcagctgga gcctcagtgg
240

aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaagggtg ggagcattta
300

caccgcagaa atgacaccgc acgccagcgc cccgcggccg
340

<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5738

Met Leu Pro Pro Trp Pro Ile Ser Ser His Gln Val Arg Met Ala Leu
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 Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
 20 25 30
 Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
 35 40 45
 Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
 50 55 60
 Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
 65 70 75 80
 Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
 85 90 95
 Gly Gly Xaa

<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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 120
 ttactcggtta attggaacaa cctctagcct gtactaaatt tccatattta tttggcccggt
 180
 ttcaaagtcc tctattctct gctcatctgt ccacatctaa gtgctttaac tattgtgggt
 240
 ttataaaata ttccaatatt ccataggacc ttatccttag tacttccat tttaaagttt
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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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 Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
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 Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
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 His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
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<212> DNA

<213> Homo sapiens

<400> 5741

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<211> 427

<212> PRT

<213> Homo sapiens

<400> 5742

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 Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Lys Gln Met Lys
 65 70 75 80
 Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85 90 95
 Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
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 Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
 115 120 125
 Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
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 Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
 165 170 175
 Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
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 Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
 210 215 220
 Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
 225 230 235 240
 Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
 245 250 255
 Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
 260 265 270
 Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
 275 280 285
 Thr Cys Ser Ser Ala Thr Ala Ala Ser Ser Gly Leu Glu Glu Trp
 290 295 300
 Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
 305 310 315 320
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
 325 330 335
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
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 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
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<210> 5745
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<212> DNA

<213> Homo sapiens

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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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			20					25					30		
Val	Thr	Gln	Lys	Leu	Met	Leu	Arg	Lys	Ala	Ser	Leu	Gly	Pro	Leu	Pro
			35				40					45			
Arg	Ala	Ser	Glu	Arg	Pro	Gly	Val	Pro	Val	Phe	Leu	Glu	Met	Gly	Pro
			50			55					60				
Ser	Ala	Ala	Gly	Cys	Glu	Ala	Leu	Arg	Ser	Ile	Thr	Gly	Arg	Ala	Trp
65				70					75					80	
Arg	Trp	Trp	Pro	Pro	Gly	Thr	Thr	Leu	Ser	Cys	Leu	Phe	Thr	Phe	His
				85				90						95	
Tyr	Gln	Val	Phe	Ser	Gly	His	Tyr	Asp	Leu	Phe	Pro	Tyr	Asn	Ser	Asp

	100		105		110
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<210> 5747

<211> 1999

<212> DNA

<213> Homo sapiens

<400> 5747

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<210> 5748

<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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			20						25				30		
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
			35						40				45		
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
			50						55				60		
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
					70					75				80	
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
			85							90				95	
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
			100						105				110		
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			115						120				125		
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
			130						135				140		
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
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<210> 5749
<211> 2849
<212> DNA
<213> Homo sapiens
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<211> 522

<212> PRT

<213> Homo sapiens

<400> 5750

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		20						25				30			
Val	Gly	Pro	Gly	Ala	Ser	Gly	Val	Cys	Pro	Thr	Ala	Cys	Ile	Cys	Ala
		35					40					45			
Thr	Asp	Ile	Val	Ser	Cys	Thr	Asn	Lys	Asn	Leu	Ser	Lys	Val	Pro	Gly
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Asn	Leu	Phe	Arg	Leu	Ile	Lys	Arg	Leu	Asp	Leu	Ser	Tyr	Asn	Arg	Ile
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4910

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<210> 5751

<211> 926

<212> DNA

<213> Homo sapiens

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<400> 5753

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<211> 221

<212> PRT

<213> Homo sapiens

<400> 5754

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Phe Pro Asn His Thr Asp Asn Leu Asn Ser Ser Gln Arg Leu Ser Pro			
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Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu			
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Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu			
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Val Arg Gln Thr Val Ile Asn Ile Cys Arg Arg Lys Arg Leu Glu Ser			
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<211> 1513

<212> DNA

<213> Homo sapiens

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<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp		
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<212> DNA

<213> Homo sapiens

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<210> 5758

<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
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Gln	Ser	Arg	Leu	Ser	Leu	Leu	Pro	Gly	His	Lys	Val	Ser	Phe	Pro	Arg
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Ser	Ser	Glu	Phe	Pro	Gly	Arg	Thr	Phe	Ser	Asp	Val	Arg	Asp	Pro	Leu
			405				410					415			
Gln	Ser	Pro	Leu	Trp	Val	Thr	Leu	Gly	Ser	Ser	Ser	Pro	Thr	Glu	Ser
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<210> 5759

<211> 1333

<212> DNA

<213> Homo sapiens

<400> 5759

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<210> 5760

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5760

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			20					25					30		
Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
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Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
	50					55					60				
Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
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				85					90					95	
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
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Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
		115					120					125			
Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
		130				135					140				
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
145					150					155				160	
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210		215		220	
Ala Arg Ser Thr Arg Asp Ser Gly Met Lys Phe Arg Asn Ser Ser Val					
225		230		235	240
Ala Met Gly Ala Ser Leu Ser Cys Ser Glu Tyr Ser Leu Lys Val Thr					
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<210> 5761

<211> 1452

<212> DNA

<213> Homo sapiens

<400> 5761

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1020

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<210> 5762

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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			20					25					30		
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		35					40					45			
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		50				55					60				
Tyr	Lys	Gly	Ala	Gly	Pro	Glu	Ile	Arg	Asp	Ala	Ile	Gln	Asn	Pro	Asn
65					70				75				80		
Asp	Ile	Gln	Leu	Gln	Glu	Lys	Ala	Trp	Asn	Ala	Val	Cys	Pro	Leu	Val
			85					90					95		
Val	Arg	Leu	Lys	Arg	Phe	Tyr	Glu	Phe	Ser	Ile	Arg	Leu	Glu	Lys	Ala
			100				105					110			
Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
		115					120					125			
Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
		130				135					140				
Leu	His	Phe	Thr	Leu	Arg	Phe	Asp	Glu	Leu	Lys	Met	Arg	Asn	Pro	Ala
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Ile	Gln	Asn	Asp	Phe	Ser	Tyr	Tyr	Arg	Arg	Thr	Ile	Ser	Arg	Asn	Arg
			165					170					175		
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		180					185				190				
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		195					200				205				
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	210					215					220				
Pro	Ile	Glu	Asn	Thr	Thr	Asp	Cys	Leu	Ser	Thr	Met	Thr	Ser	Val	Cys
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<210> 5763
<211> 3840
<212> DNA
<213> Homo sapiens
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<212> PRT

<213> Homo sapiens

<400> 5764

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 Pro Ser Ala Glu Ala Lys Leu Lys Lys Asn Arg Cys Ala Asn Cys Phe

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Tyr	Tyr	Leu	Ala	Cys	Gly	Phe	Cys	Arg	Trp	Thr	Ser	Arg	Asp	Val Gly
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Met	Ala	Asp	Lys	Ser	Val	Ala	Ser	Gly	Gly	Trp	Gln	Glu	Pro	Glu Asn
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Pro	His	Thr	Gln	Arg	Met	Asn	Lys	Leu	Ile	Glu	Tyr	Tyr	Gln	Gln Leu
					150					155				160
Ala	Gln	Lys	Glu	Lys	Val	Glu	Arg	Asp	Arg	Lys	Lys	Leu	Ala	Arg Arg
				165				170						175
Arg	Asn	Tyr	Met	Pro	Leu	Ala	Phe	Ser	Asp	Lys	Tyr	Gly	Leu	Gly Thr
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				230						235				240
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			245						250					255
Gln	Pro	Asp	Phe	Gln	Pro	Val	Cys	Ala	Ser	Gln	Leu	Tyr	Pro	Arg His
			260					265					270	
Lys	His	Leu	Leu	Ile	Lys	Arg	Ser	Leu	Arg	Cys	Arg	Lys	Cys	Glu His
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Lys	Glu	Leu	Val	Leu	Ala	Gly	Lys	Asp	Ala	Ala	Ala	Glu	Tyr	Asp Glu
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					390					395				400
Arg	Lys	Ala	Asn	Lys	Val	Gly	Ile	Phe	Ile	Lys	Val	Thr	Pro	Gln Arg
			405						410					415
Glu	Glu	Gly	Glu	Val	Thr	Val	Cys	Phe	Lys	Met	Lys	His	Asp	Phe Lys
			420				425					430		
Asn	Leu	Ala	Ala	Pro	Ile	Arg	Pro	Ile	Glu	Glu	Ser	Asp	Gln	Gly Thr
			435				440					445		
Glu	Val	Ile	Trp	Leu	Thr	Gln	His	Val	Glu	Leu	Ser	Leu	Gly	Pro Leu
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Leu	Pro													
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<210> 5765

<211> 3220

<212> DNA

<213> Homo sapiens

<400> 5765

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<210> 5766

<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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			85						90					95	
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		100						105					110		
His	Leu	Ala	Asn	Ser	Trp	Glu	Ser	Ser	Val	Gly	Ser	Leu	Val	Glu	Gly
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Asp	Pro	Ile	Val	Ala	Leu	Ser	Trp	Leu	His	Asn	Gly	Val	Lys	Leu	Ala
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Leu	His	Val	Glu	Lys	Ser	Gly	Ala	Ser	Ser	Phe	Gly	Glu	Lys	Phe	Ser
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Arg	Val	Lys	Phe	Ser	Pro	Ser	Leu	Thr	Leu	Phe	Gly	Gly	Lys	Pro	Met
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Glu	Gly	Trp	Ile	Ala	Val	Thr	Val	Ser	Gly	Leu	Val	Thr	Val	Ser	Leu
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Leu	Lys	Pro	Ser	Gly	Gln	Val	Leu	Thr	Ser	Thr	Glu	Ser	Leu	Cys	Arg
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Asn	Ile	Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln
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Ile	Phe	Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile
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Leu	Lys	Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser

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 385 390 395 400
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 405 410 415
 Pro Ala Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys
 420 425 430
 Ala Met Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser
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 His Gly Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro
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 Cys Met Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln
 485 490 495
 Pro Ser Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr
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 Arg Gln Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala
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 Lys Ser Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro
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 Cys Cys Thr Cys Trp Pro Ala Tyr Pro Thr Ser Pro Ala Pro Pro Arg
 625 630 635 640
 Ser Pro Ala Pro Pro Arg Ser Pro Pro Pro Pro Arg Ser Pro Pro Pro
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 Pro Gly His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg
 675 680 685
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 690 695 700
 Leu Pro Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu
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 Leu Phe Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly
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 Pro Ala Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu
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 Pro Ser Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp
 755 760 765
 Gly Leu Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe

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Gly Arg Ala Pro Thr Leu	Pro Gly Ser Ala	Ala Thr Leu Gln Leu Asp
785	790	795
Gly Leu Ala Arg Ala Pro Gly Gln	Pro Lys Ile Asp His Leu Arg Arg	800
	805	810
Leu His Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg		815
	820	825
Cys Gly Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val		830
	835	840
Lys Gln Trp Glu Gln Arg Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu		845
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<210> 5767

<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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		20						25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
		35					40					45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
	50					55				60					
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65					70					75				80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
		85						90					95		
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100					105						110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
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Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu				
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Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn				
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Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln				
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Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn				
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Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu				
225		230		235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp				
	245		250	255
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys				
	260		265	270
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser				
	275		280	285
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp				
	290		295	300
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His				
305		310		315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu				
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Glu Gly Ala Glu Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn				
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<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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300

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427

<210> 5770

<211> 85
 <212> PRT
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<400> 5770
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 35 40 45
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
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 <212> DNA
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<400> 5771
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2220
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2280
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2340
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2400
atattaaata gatgtgtctc taccctcaca aaatgtacat attctgctgt ctattgggaa
2460
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2520

tgctactaaa taaaaaaaaa
2539

<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

Tyr Thr Cys Asn Glu Gly Phe Leu Leu Glu Gly Ala Arg Ser Arg Val
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Cys Leu Ala Asn Gly Ser Trp Ser Gly Ala Thr Pro Asp Cys Val Pro
20 25 30
Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
35 40 45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
50 55 60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
65 70 75 80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
85 90 95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
100 105 110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
115 120 125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
130 135 140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
145 150 155 160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
165 170 175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
180 185 190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
195 200 205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
210 215 220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
225 230 235 240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
245 250 255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
260 265 270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
275 280 285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
290 295 300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
305 310 315 320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
325 330 335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
340 345 350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

355	360	365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys		
370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		
405	410	415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		
420	425	430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		
435	440	445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		
450	455	460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		
485	490	495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		
500	505	510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		
515	520	525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		
530	535	540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		
565	570	575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		
580	585	590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		
595	600	605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		
610	615	620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		
625	630	635
Pro Leu		640

<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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cggagccgga gctcgtcccg ctccaagcac accaagagca gcaagcacia caagaagcgc
120

agccggtccc ggtecgatc ccgggacaag gagcgcgtgc ggaagcgttc caaatctcgg
180

gaaagtaaac ggaaccggcg gcgggagtcg cgggtccggt cgcgtccac caacacggcc
240

gtgtcccggc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

tcggg'gcac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg
 360
 agaagaaagc ggagttcgag cggcagcgaa aaattcgaca gcaagaaata gaagaaaaac
 420
 tcatcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa
 480
 gaactggaga aaaggaagga tgaaattgaa cgagaagtcc tccgaagggt ggaggaagcc
 540
 aaacgcacga tggaaaagca gttgctcgaa gaactcgag
 579

<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

Xaa	Arg	Val	Arg	Gly	Leu	Arg	Arg	Ala	Val	Arg	Ala	Ser	Pro	Gly	Arg
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Met	Gly	Arg	Ser	Arg	Ser	Arg	Ser	Ser	Arg	Ser	Lys	His	Thr	Lys	
			20				25				30				
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35				40				45					
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55				60					
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70				75					80		
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
				85				90					95		
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
				100											

<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

cgctctcttc ccgctcggaa ggtcccaagg tgagacacct tcagcaggtc tcagggaaga
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 tggcagccct aggggacatt caggagtccc cttctgtccc gtccctgtc agtctctcat
 120
 caccggggac acctggaacc cagcaccacg agcctcagct tcacctccat ggcatcaac
 180
 atgctaagg tctctccca gccgtccgac ctggatctcc aagacgtaga ggaagtggag
 240
 atcggcagag acaccttctg gcccgactcc gagcccaagc cggagcaggc tccacgtctc
 300
 cctggctctc aggccctga cgagggggcg ggcggggcgc tgcgcacctc cgtgaggagc
 360
 cttccccgca gggcccgggt cagcgccggc ttcgggctg aatccagcgc ggagcggccg
 420
 gcgggccagc cgctggggc cgctccttgc gccagccgc ggggcgctg gcgcgtgacg
 480

ctctgtgcagc aagcagcggc cgggcccag ggtgcgccc agcgggctgc cgagctggga
 540
 gtcaacttcg gtcggagccg gcagggcagc gcgcggggga ccaagccgca caggtgcgag
 600
 gcctgcggca agagtttcaa gtataactcg ctgctcctga agcaccagcg catccacacg
 660
 ggcgagaagc cctacgctg ccacgagtgc ggcaagtgtt tcgcccagc ttcgcgcttc
 720
 atccagcacc agcgcaccca cagcggcgag aagccctacg cctgccccga gtgcagcaag
 780
 accttcacgc gcagctccaa cctcatcaag caccaggtca tccacagcgg cgagcggccc
 840
 ttcgcctgcg gcgactgcgg caaactgttc cgccgcagct tcgcgctcct ggagcacgcg
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 cgctgtcaca gcggcgagaa gccctacgag tgctccgact gcggcaagtg cttccgcggc
 960
 cgctgcact tcttcggca caaccgcaca cacacgggag agaagcccta cactgcctc
 1020
 gactgcggca agagcttcag ccacagctcg cacctcatca agcaccagcg caccaccgt
 1080
 ggctgtcggc cctacgctg cccgttgtgt ggcaagagct tcagccggcg ctccaacctg
 1140
 caccggcacg agaagatcca caccaccggg cccaaggccc tggccatgct gatgctggg
 1200
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 1260
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 1320
 ggagagaggg gctcgggaag ggagctgggg cggtaggggc atggggtagg gcatggcgat
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 gggggagggg gagggcgaga aagggcaggc actctgcgaa ttaaaggcct tggacttgaa
 1440
 a
 1441

<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

Met	Gly	Ile	Asn	Met	Pro	Lys	Val	Leu	Ser	Gln	Pro	Ser	Asp	Leu	Asp
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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
			20					25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35					40					45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
		50				55					60				
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65				70					75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85					90					95		
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

Pro	Glu	Gly	Ala	Pro	Glu	Arg	Ala	Ala	Glu	Leu	Gly	Val	Asn	Phe	Gly
		115					120					125			
Arg	Ser	Arg	Gln	Gly	Ser	Ala	Arg	Gly	Thr	Lys	Pro	His	Arg	Cys	Glu
		130				135					140				
Ala	Cys	Gly	Lys	Ser	Phe	Lys	Tyr	Asn	Ser	Leu	Leu	Lys	His	Gln	
145					150					155				160	
Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Ala	Cys	His	Glu	Cys	Gly	Lys
			165						170					175	
Cys	Phe	Ala	Ala	Ala	Ser	Arg	Phe	Ile	Gln	His	Gln	Arg	Ile	His	Ser
			180					185					190		
Gly	Glu	Lys	Pro	Tyr	Ala	Cys	Pro	Glu	Cys	Ser	Lys	Thr	Phe	Thr	Arg
		195					200					205			
Ser	Ser	Asn	Leu	Ile	Lys	His	Gln	Val	Ile	His	Ser	Gly	Glu	Arg	Pro
	210					215						220			
Phe	Ala	Cys	Gly	Asp	Cys	Gly	Lys	Leu	Phe	Arg	Arg	Ser	Phe	Ala	Leu
225				230						235					240
Leu	Glu	His	Ala	Arg	Val	His	Ser	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser
			245						250					255	
Asp	Cys	Gly	Lys	Cys	Phe	Arg	Gly	Arg	Ser	His	Phe	Phe	Arg	His	Asn
		260						265					270		
Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Leu	Asp	Cys	Gly	Lys
		275					280					285			
Ser	Phe	Ser	His	Ser	Ser	His	Leu	Ile	Lys	His	Gln	Arg	Thr	His	Arg
	290					295						300			
Gly	Val	Arg	Pro	Tyr	Ala	Cys	Pro	Leu	Cys	Gly	Lys	Ser	Phe	Ser	Arg
305					310					315					320
Arg	Ser	Asn	Leu	His	Arg	His	Glu	Lys	Ile	His	Thr	Thr	Gly	Pro	Lys
			325						330					335	
Ala	Leu	Ala	Met	Leu	Met	Leu	Gly	Ala	Ala	Ala	Ala	Gly	Ala	Leu	Ala
		340						345					350		
Thr	Pro	Pro	Pro	Ala	Pro	Thr									
		355													

<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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120tgcgtgcggc ctgcctcaag caaccaggta cgtaggtcgg cgcccagct cggcgctgcg
180gtgggagccg gagggcgaca gtcagagccg ggggtgccagc gggacgcgac cgccagatcc
240acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tcccggggcc tctcgtgct
300gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgetgcccgt
360gatcacccgac tggcccttgt aagcaccttc gcagcaggaa gcccagagct gcgctgccc
420

tttctgaagg ctgtggaaga ggttgagtg ggcgcattt agcttgcccc atccccattt
 480
 gaggtctgtc ggagctgccc ttcaagtgtga gcattccaaa tgggtacccc agcctcgggtg
 540
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 gccaacatct tccaggacgc cgagctgctg cagatccaag ccctgtttca acgcagcggg
 660
 gaccagctgg ccgaggaacg ggcacagatc atctgggaat gtgcagggga ccaccgtgtg
 720
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 780
 ctgcgtacac cactgcagcc gcctcagaat cctggagccc cactctgcac tggccaaccc
 840
 acagagtgcc acagagacag cctccagtga gcagtatctg cactctagga agaaaagtgc
 900
 caggatccgc cggaactgga ggaagtcagg cccacaagc tacctccacc agatcagaca
 960
 ctgatccagg gaaagagcca ggaatggcag tgtcttcctt cttgccaaaa ggctggggga
 1020
 ggtgaaggaa gagagacttt aggcaagcag cccaaagggg taaatgaaag caagaggctg
 1080
 ctgccactga cctgctccat tcagaacaag actggatgct tctgttgagc tctccattat
 1140
 gtgggaccca ttctcacca aaatgaggag agacagtgc tggtcctgcc acagtccttc
 1200
 ccagtctaac actattcctg ggctgcatga tattcccttg ggagcaaagt gacaggcact
 1260
 tagatgcagc atttcaccac tcatgtact aatcatctac ctgctactac tgtaaacat
 1320
 ggttcagca gcctgttcca caccaccaca ccatcaggat agcacaggga aactgtagtt
 1380
 taagtggcaa ataaaaacat ttgcatcaaa aaaaaaaaaa aaaaaaaaaa a
 1431

<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

Met	Leu	Thr	Leu	Lys	Gly	Ser	Ser	Asp	Arg	Pro	Gln	Met	Gly	Met	Gly
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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20					25					30		
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35					40					45			
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50					55					60				
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65					70					75				80	
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85						90					95	
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

	100		105		110										
Gln	Arg	Arg	Ala	Gly	Pro	Pro	Thr	Tyr	Val	Pro	Gly	Cys	Leu	Arg	Gln
	115				120						125				
Ala	Ala	Arg	Ser	Pro	Lys	Leu	Val	Arg	Ala	Thr	Trp	Val	Thr	Ala	Ala
	130				135						140				
Val	Pro	Gly	Arg	Lys	Arg	Ser	Leu	Ala	Pro	Glu	Gln	Pro	Ile	Leu	Gly
145				150						155				160	
Pro	Ser	Gln	Val												

<210> 5779

<211> 371

<212> DNA

<213> Homo sapiens

<400> 5779

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cgaggagagag ggggtatttc agccttgtct ggcattccctt gtgtctgcnt gaggggtgtgt
120
gcacacggga atgtgtgcgg gtgtgtgtgc gtgcatgcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtaggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt
240
acagggtgggt gtgtgtatgt gtgtgggggt gtgcccattt gtgcagggtgt gtgggtgtgc
300
agggtcncat gcctgtgtgt ggggtgtgncc ccgtgtgtac ccctgtggag gtgtgtgggt
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gtgtgcagtg t
371

<210> 5780

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5780

Leu	Leu	Arg	Arg	Val	Glu	Gly	Arg	Lys	Gly	Arg	Thr	His	Asp	Leu	Pro
1				5					10					15	
Gln	Arg	His	Gly	Arg	Glu	Arg	Gly	Val	Ile	Ser	Ala	Leu	Ser	Gly	Ile
		20						25					30		
Pro	Cys	Val	Cys	Xaa	Arg	Val	Cys	Ala	His	Gly	Asn	Val	Cys	Gly	Cys
		35					40					45			
Val	Cys	Val	His	Ala	Ala	Val	Cys	Gly	Cys	Ala	Xaa	Val	Cys	Gly	Cys
		50				55					60				
Val	Gly	Val	Cys	Gly	Cys	Val	His	Gln	Cys	Arg	Cys	Ala	Trp	Val	Cys
65				70					75					80	
Thr	Gly	Gly	Cys	Val	Tyr	Val	Cys	Gly	Gly	Val	Pro	Ile	Cys	Ala	Gly
			85					90					95		
Val	Trp	Val	Cys	Arg	Val	Xaa	Cys	Leu	Cys	Val	Gly	Val	Xaa	Pro	Cys
			100					105					110		
Val	Pro	Leu	Trp	Arg	Cys	Val	Gly	Val	Cys	Ser					
			115				120								

<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

<400> 5781
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 120
 ccaccaggtg aggatggcac tgcaacatct tccactgagg ctccagctgc cctctcaggt
 180
 acatcagggc ctgganctgc ctctctcca ggagggccag gactcggccc cctgccagcc
 240
 cccgaagcat tgcagccagg agtgcagcgt gggggccctg caggccatgg ccaggcccca
 300
 gcgccaccag caccaggtca ggctggaagc cataggccag gggcagcacc aagcccaaga
 360
 tgcagctcag gaaaccaccg gtcactactg gcagtggcgt ggagacatgg aacatggata
 420
 gggcagccgc ctcttgccc ctgatgttca gccacagact cctcccgtca tgggcgaggt
 480
 ctggaggccg gtccagctgt cccagggccca cgcacagcag cctggaagaa gagctggcct
 540
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 600
 aggatagggg tgcccacagg tctgcccgc agaggctcag gatggccaag tgaggcttac
 660
 ctctgggctc cgtgggacag gectctcca acagccacat ccagggtggc tgctgcagca
 720
 gaggtggag tggctgtat accactgttc acctgtggga tgaataaaca gtggagaatg
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 840
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 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
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 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

85 90 95
 Gly Gln Ala Pro Ala Pro Pro Ala Pro Gly Gln Ala Gly Ser His Arg
 100 105 110
 Pro Gly Ala Ala Pro Ser Pro Arg Cys Ser Ser Gly Asn His Arg Ser
 115 120 125
 Ser Leu Ala Val Ala Trp Arg His Gly Thr Trp Ile Gly Gln Pro Pro
 130 135 140
 Pro Cys Pro
 145

<210> 5783

<211> 1839

<212> DNA

<213> Homo sapiens

<400> 5783

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 60
 ctggtgatcc agcagcgcgg ggtgcgaatc tacgatggcg aggagaagat aaaatttgat
 120
 gctgggactc tccttcttag tacacaccga ctgatttggga gagatcagaa aaatcatgag
 180
 tgttgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
 240
 gggaagagtg ccaaaatagt ggttcattct caccagctc ctcttaacaa agaacctggc
 300
 ccattccaga gtagtaagaa ctctacatc aaactctcct tcaaagaaca tggccagatt
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 tcccagtcac tacaacaaa tagaggaccc cagccaggaa gaataagggc ttaggaatt
 480
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 600
 tcaattgcta ataaaattaa agacaaacaa ggtgacatca cagaagatga gaccatcagg
 660
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 720
 tcaggcacac agtaccacat gcagctggcc aaacaactgg ctggaatatt gcaggtgcct
 780
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 840
 cgaggaatgg aattgctctc accagaagat ttagtgaatg cgtgcaagat gctggaagca
 900
 ctgaaattac ctctcaggct ccgtgtgttt gacagtggcg tcatggtaat tgagcttcag
 960
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 1020
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 1080
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 1140

ttttacccaa atttatttat gacacagagc taagggtttt gtatttataaa tcctttttgt
 1200
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile	
		35				40					45				
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
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Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
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Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85					90					95		
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100					105					110			
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120				125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
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Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
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Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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 Gly Ile Ala Asn Pro Val Thr Arg Glu Thr Tyr Gly Ser Gly Thr Gln
 225 230 235 240
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 Leu Glu Glu Arg Gly Gly Ile Met Ser Leu Thr Glu Val Tyr Cys Leu
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<210> 5785

<211> 785

<212> DNA

<213> Homo sapiens

<400> 5785

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<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

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Lys	Pro	Ala	Ala	Arg	Ala	Ala	Asp	Leu	Ala	Ala	Pro	Ala	Gly	Ala	Ala
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Leu	Ala	Gln	Pro	Leu	Gly	Pro	Trp	Pro	Leu	Ser	Ser	Ala	Gly	Pro	Arg
		50				55					60				
Leu	Val	Phe	Asn	Arg	Val	Asn	Arg	Arg	Arg	Asp	Pro	Ser	Lys	Ser	Pro
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Ser	Leu	Gln	Gly	Thr	Gln	Glu	Thr	Tyr	Thr	Leu	Ala	His	Lys	Glu	Asn
			85					90					95		
Val	Arg	Phe	Val	Ser	Glu	Ala	Trp	Gln	Gln	Val	Gln	Gln	Gln	Leu	Asp
			100					105					110		
Gly	Gly	Pro	Ala	Gly	Glu	Gly	Gly	Pro	Arg	Pro	Val	Gln	Tyr	Val	Glu
		115					120					125			
Arg	Thr	Pro	Asn	Pro	Arg	Leu	Gln	Asn	Phe	Val	Pro	Ile	Asp	Leu	Asp
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<210> 5787

<211> 1683

<212> DNA

<213> Homo sapiens

<400> 5787

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<210> 5788

<211> 417

<212> PRT

<213> Homo sapiens

<400> 5788

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Ser Cys Glu Tyr Glu Thr Arg Leu Pro Gly Asn His Ser Thr Ser Gln						
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Glu Ile Phe Arg Gln Arg Phe Arg His Leu Arg Tyr Gln Glu Thr Pro						
	50			55		60
Gly Pro Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp						
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Leu Arg Pro Glu Lys His Thr Lys Glu Gln Ile Leu Glu Phe Leu Val						
		85			90	95
Leu Glu Gln Phe Leu Thr Ile Leu Pro Glu Glu Leu Gln Ser Trp Val						
	100			105		110
Arg Gly His His Pro Lys Ser Gly Glu Glu Ala Val Thr Val Leu Glu						
	115			120		125
Asp Leu Glu Lys Gly Leu Glu Pro Glu Pro Gln Val Pro Gly Pro Ala						
	130			135		140
His Gly Pro Ala Gln Glu Glu Pro Trp Glu Lys Lys Glu Ser Leu Gly						
	145			150		155
Ala Ala Gln Glu Ala Leu Ser Ile Gln Leu Gln Pro Lys Glu Thr Gln						
		165			170	175
Pro Phe Pro Lys Ser Glu Gln Val Tyr Leu His Phe Leu Ser Val Val						
	180			185		190
Thr Glu Asp Gly Pro Glu Pro Lys Asp Lys Gly Ser Leu Pro Gln Pro						
	195			200		205
Pro Ile Thr Glu Val Glu Ser Gln Val Phe Ser Glu Lys Leu Ala Thr						
	210			215		220
Asp Thr Ser Thr Phe Glu Ala Thr Ser Glu Gly Thr Leu Glu Leu Gln						
	225			230		235
Gln Arg Asn Pro Lys Ala Glu Arg Leu Arg Trp Ser Pro Ala Gln Glu						
		245			250	255
Glu Ser Phe Arg Gln Met Val Val Ile His Lys Glu Ile Pro Thr Gly						
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Lys Lys Asp His Glu Cys Ser Glu Cys Gly Lys Thr Phe Ile Tyr Asn						
	275			280		285
Ser His Leu Val Val His Gln Arg Val His Ser Gly Glu Lys Pro Tyr						
	290			295		300
Lys Cys Ser Asp Cys Gly Lys Thr Phe Lys Gln Ser Ser Asn Leu Gly						
	305			310		315
Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Phe Glu Cys Asn Glu						
		325			330	335
Cys Gly Lys Ala Phe Arg Trp Gly Ala His Leu Val Gln His Gln Arg						
	340			345		350
Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala						
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Phe Ser Gln Ser Ser Tyr Leu Ser Gln His Arg Arg Ile His Ser Gly						
	370			375		380
Glu Lys Pro Phe Ile Cys Lys Glu Cys Gly Lys Ala Tyr Gly Trp Cys						
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<212> DNA
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<210> 5790
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<400> 5790

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 35 40 45
 Pro Gln Pro Gly Ala Gly His Asp Glu Gly Pro Gly Ser Gly Trp Ala
 50 55 60
 Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala Arg Glu Ser Pro
 65 70 75 80
 Gly His Val Ser Glu Pro Asp Arg Thr Gln Leu Ser Gln Asp Leu Gly
 85 90 95
 Gly Gly Thr Leu Ala Met Asp Thr Leu Pro Asp Asn Arg Thr Arg Val
 100 105 110
 Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu Tyr Gly Pro Ser
 115 120 125
 Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala Glu Ala Asn Arg
 130 135 140
 Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr His Arg Gln Ala
 145 150 155 160
 Ser Arg Val Val Leu Ser Phe Asp Phe Pro Phe Tyr Gly His Pro Leu
 165 170 175
 Arg Gln Ile Thr Ile Ala Thr Gly Gly Phe Ile Phe Met Gly Asp Val
 180 185 190
 Ile His Arg Met Leu Thr Ala Thr Gln Tyr Val Ala Pro Leu Met Ala
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 210 215 220
 Asn Gly Thr Val Phe Val Val Gln Trp Asp His Val Tyr Leu Gln Gly
 225 230 235 240
 Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala Leu His His Asp
 245 250 255
 Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met Ser Val Pro Glu
 260 265 270
 Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu Ser Asp Ala Phe
 275 280 285
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 290 295 300
 Ile Phe Glu Tyr His Arg Ile Glu Leu Asp Pro Ser Lys Val Thr Ser
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 Met Ser Ala Val Glu Phe Thr Pro Leu Pro Thr Cys Leu Gln His Arg
 325 330 335
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 Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp Arg Tyr Arg Gln
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<210> 5791

<211> 3285

<212> DNA

<213> Homo sapiens

<400> 5791

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<210> 5792

<211> 479

<212> PRT

<213> Homo sapiens

<400> 5792

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			20					25					30		
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<213> Homo sapiens

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<211> 200

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<213> Homo sapiens

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			20					25					30		
Tyr	Leu	Arg	Lys	Glu	Met	Thr	Gln	Asn	Ile	Tyr	Gln	Met	Ala	Thr	Phe
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Ala	Thr	Leu	Pro	Phe	Leu	Ser	Thr	Val	Val	Thr	Asp	Lys	Leu	Phe	Val
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Gln	Thr	Gln	Met	Lys	Leu	Met	Ala	Ile	Pro	Leu	Val	Phe	Gln	Ile	Met
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<213> Homo sapiens

<400> 5800

Met Glu Glu Gly Ala Arg His Arg Asn Asn Thr Glu Lys Lys His Pro

1

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Gly Val	Ala Leu Lys Lys Glu Ile	Gly Leu Val Ser Ala Cys Gly Ile			
	35	40	45		
Ile Val	Gly Asn Ile Ile Gly Ser Gly Ile Phe Val Ser Pro Lys Gly				
	30	55	60		
Val Leu	Glu Asn Ala Gly Ser Val Gly Leu Ala Leu Ile Val Trp Ile				
65		70	75		80
Val Thr	Gly Phe Ile Thr Val Val Gly Ala Leu Cys Tyr Ala Glu Leu				
	85	90	95		
Gly Val	Thr Ile Pro Lys Ser Gly Gly Asp Tyr Ser Tyr Val Lys Asp				
	100	105	110		
Ile Phe	Gly Gly Leu Ala Gly Phe Leu Arg Leu Trp Ile Ala Val Leu				
	115	120	125		
Val Ile	Tyr Pro Thr Asn Gln Ala Val Ile Ala Leu Thr Phe Ser Asn				
	130	135	140		
Tyr Val	Leu Gln Pro Leu Phe Pro Thr Cys Phe Pro Pro Glu Ser Gly				
145		150	155		160
Leu Arg	Leu Leu Ala Ala Ile Cys Leu Leu Leu Leu Thr Trp Val Asn				
	165	170	175		
Cys Ser	Ser Val Arg Trp Ala Thr Arg Val Gln Asp Ile Phe Thr Ala				
	180	185	190		
Gly Lys	Leu Leu Ala Leu Ala Leu Ile Ile Ile Met Gly Ile Val Gln				
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Ile Cys	Lys Gly Glu Tyr Phe Trp Leu Glu Pro Lys Asn Ala Phe Glu				
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Asn Phe	Gln Glu Pro Asp Ile Gly Leu Val Ala Leu Ala Phe Leu Gln				
225		230	235		240
Gly Ser	Phe Ala Tyr Gly Gly Trp Asn Phe Leu Asn Tyr Val Thr Glu				
	245	250	255		
Glu Leu	Val Asp Pro Tyr Lys Asn Leu Pro Arg Ala Ile Phe Ile Ser				
	260	265	270		
Ile Pro	Leu Val Thr Phe Val Tyr Val Phe Ala Asn Val Ala Tyr Val				
	275	280	285		
Thr Ala	Met Ser Pro Gln Glu Leu Leu Ala Ser Asn Ala Val Ala Val				
	290	295	300		
Thr Phe	Gly Glu Lys Leu Leu Gly Val Met Ala Trp Ile Met Pro Ile				
305		310	315		320
Ser Val	Ala Leu Ser Thr Phe Gly Gly Val Asn Gly Ser Leu Phe Thr				
	325	330	335		
Ser Ser	Arg Leu Phe Phe Ala Gly Ala Arg Glu Gly His Leu Pro Ser				
	340	345	350		
Val Leu	Ala Met Ile His Val Lys Arg Cys Thr Pro Ile Pro Ala Leu				
	355	360	365		
Leu Phe	Thr Cys Ile Ser Thr Leu Leu Met Leu Val Thr Ser Asp Met				
	370	375	380		
Tyr Thr	Leu Ile Asn Tyr Val Gly Phe Ile Asn Tyr Leu Phe Tyr Gly				
385		390	395		400
Val Thr	Val Ala Gly Gln Ile Val Leu Arg Trp Lys Lys Pro Asp Ile				
	405	410	415		
Pro Arg	Pro Ile Lys Ile Asn Leu Leu Phe Pro Ile Ile Tyr Leu Leu				
	420	425	430		
Phe Trp	Ala Phe Leu Leu Val Phe Ser Leu Trp Ser Glu Pro Val Val				
	435	440	445		
Cys Gly	Ile Gly Leu Ala Ile Met Leu Thr Gly Val Pro Val Tyr Phe				

450	455	460
Leu Gly Val Tyr Trp Gln His Lys Pro Lys Cys Phe Ser Asp Phe Ile		
465	470	475
Glu Leu Leu Thr Leu Val Ser Gln Lys Met Cys Val Val Val Tyr Pro		480
	485	490
Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu		495
	500	505
Glu Gln Gln Gln Pro Met Tyr Gln Pro Thr Pro Thr Lys Asp Lys Asp		510
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<210> 5801

<211> 2418

<212> DNA

<213> Homo sapiens

<400> 5801

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<210> 5802

<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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Phe Glu Lys Val Pro Leu Phe Met Ser Arg Ala Pro Ser Glu Ile Asp			
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Pro Arg Glu Asn Pro Asp Leu Ala Cys Leu Gln Ser Ile Ile Phe Asp			
	50	55	60
Glu Glu Arg Ser Pro Glu Glu Gln Ala Lys Thr Tyr Lys Asp Glu Gly			
65	70	75	80
Asn Asp Tyr Phe Lys Glu Lys Asp Tyr Lys Lys Ala Val Ile Ser Tyr			
	85	90	95
Thr Glu Gly Leu Lys Lys Lys Cys Ala Asp Pro Asp Leu Asn Ala Val			
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Leu Tyr Thr Asn Arg Ala Ala Ala Gln Tyr Tyr Leu Gly Asn Phe Arg			
	115	120	125
Ser Ala Leu Asn Asp Val Thr Ala Ala Arg Lys Leu Lys Pro Cys His			
	130	135	140
Leu Lys Ala Ile Ile Arg Gly Ala Leu Cys His Leu Glu Leu Lys His			
145	150	155	160
Phe Ala Glu Ala Val Asn Trp Cys Asp Glu Gly Leu Gln Ile Asp Ala			
	165	170	175
Lys Glu Lys Lys Leu Leu Glu Met Arg Ala Lys Ala Asp Lys Leu Lys			
	180	185	190
Arg Ile Glu Gln Arg Asp Val Arg Lys Ala Asn Leu Lys Glu Lys Lys			
	195	200	205
Glu Arg Asn Gln Asn Glu Ala Leu Leu Gln Ala Ile Lys Ala Arg Asn			
	210	215	220
Ile Arg Leu Ser Glu Ala Ala Cys Glu Asp Glu Asp Ser Ala Ser Glu			
225	230	235	240
Gly Leu Gly Glu Leu Phe Leu Asp Gly Leu Ser Thr Glu Asn Pro His			
	245	250	255
Gly Ala Arg Leu Ser Leu Asp Gly Gln Gly Arg Leu Ser Trp Pro Val			
	260	265	270
Leu Phe Leu Tyr Pro Glu Tyr Ala Gln Ser Asp Phe Ile Ser Ala Phe			
	275	280	285
His Glu Asp Ser Arg Phe Ile Asp His Leu Met Val Met Phe Gly Glu			
	290	295	300
Thr Pro Ser Trp Asp Leu Glu Gln Lys Tyr Cys Leu Ile Ile Trp Arg			
305	310	315	320
Ser Thr Leu Arg Met Arg Thr Gly Gln Asn Tyr Thr Gly Cys Leu Pro			
	325	330	335
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<210> 5803

<211> 692

<212> DNA

<213> Homo sapiens

<400> 5803

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120

ggagtgaatt tggaccaaac tgtaaaggaa tttatcgtat ttctaaagca agatgtccct
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<210> 5804

<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

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Glu	His	Arg	Asn	Phe	Lys	Pro	Val	Val	Tyr	His	Gly	Val	Asn	Leu	Asp
			20					25					30		
Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
	35						40					45			
Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
	50					55					60				
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
65				70					75				80		
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85					90					95		
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
			100					105					110		
Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
	115						120					125			

<210> 5805

<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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 120

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<210> 5806

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

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Lys	Met	Thr	Glu	Val	Met	Met	Asn	Thr	Gln	Pro	Met	Glu	Glu	Ile	Gly
			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35					40					45			
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50					55				60					
Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
65					70				75					80	
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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Glu	Thr	Ala	Lys	Glu	Asn	Lys	Glu	Gln							

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105

<210> 5807

<211> 1429

<212> DNA

<213> Homo sapiens

<400> 5807

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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Leu Leu Gly Gly Ile Pro Glu Ser Gly Gly Pro Asp Ala Arg Gln Gly
35 40 45
Trp Leu Ala Ala Leu Gln Asp Arg Ser Ile Leu Ala Pro Leu Ala Trp
50 55 60
Asp Leu Gly Leu Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala
65 70 75 80
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln
85 90 95
Arg Ser Leu Tyr Val Ala Cys Thr Ala Leu Ala Leu Gln Leu Val Met
100 105 110
Arg Tyr Trp Glu Pro Ile Pro Lys Gly Pro Val Leu Trp Glu Ala Arg
115 120 125
Ala Glu Pro Trp Ala Thr Trp Val Pro Leu Leu Cys Phe Val Leu His
130 135 140
Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr
145 150 155 160
Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu
165 170 175
Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser
180 185 190
His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val
195 200 205
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr
210 215 220
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr
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Leu Arg Ala Gln Leu Gln Arg Lys Leu His Leu Leu Ser Arg Pro Gln
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Asp Gly Glu Ala Glu
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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 2009

<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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Gly	Gly	Gln	Trp	Arg	Asp	Leu	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly
				20					25				30		
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr	Lys
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His	Pro	Thr	Pro												
				50											

<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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<210> 5812

<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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		20						25					30		
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
		35					40					45			
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
		50				55					60				
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65					70					75				80	
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
			85					90					95		
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
		100					105					110			
Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

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Ala Arg Arg Arg Ala Leu Lys Arg	Phe Val Asn Leu Val Ala Arg His	
145	150	155
Pro Leu Phe Ser Glu Asp Val Val	Leu Lys Leu Phe Leu Ser Phe Ser	
165	170	175
Gly Ser Asp Val Gln Asn Lys Leu	Lys Glu Ser Ala Gln Cys Val Gly	
180	185	190
Asp Glu Phe Leu Asn Cys Lys Leu	Ala Thr Arg Ala Lys Asp Phe Leu	
195	200	205
Pro Ala Asp Ile Gln Ala Gln Phe	Ala Ile Ser Arg Glu Leu Ile Arg	
210	215	220
Asn Ile Tyr Asn Ser Phe His Lys	Leu Arg Asp Arg Ala Glu Arg Ile	
225	230	235
Ala Ser Arg Ala Ile Asp Asn Ala	Ala Asp Leu Leu Ile Phe Gly Lys	
245	250	255
Glu Leu Ser Ala Ile Gly Ser Asp	Thr Thr Pro Leu Pro Ser Trp Ala	
260	265	270
Ala Leu Asn Ser Ser Thr Trp Gly	Ser Leu Lys Gln Ala Leu Lys Gly	
275	280	285
Leu Ser Val Glu Phe Ala Leu Leu	Ala Asp Lys Ala Ala Gln Gln Gly	
290	295	300
Lys Gln Glu Glu Asn Asp Val Val	Glu Lys Leu Asn Leu Phe Leu Asp	
305	310	315
Leu Leu Gln Ser Tyr Lys Asp Leu	Cys Glu Arg His Glu Lys Gly Val	
325	330	335
Leu His Lys His Gln Arg Ala Leu	His Lys Tyr Ser Leu Met Lys Arg	
340	345	350
Gln Met Met Ser Ala Thr Ala Gln	Asn Arg Glu Pro Glu Ser Val Glu	
355	360	365
Gln Leu Glu Ser Arg Ile Val Glu	Gln Glu Asn Ala Ile Gln Thr Met	
370	375	380
Glu Leu Arg Asn Tyr Phe Ser Leu	Tyr Cys Leu His Gln Glu Thr Gln	
385	390	395
Leu Ile His Val Tyr Leu Pro Leu	Thr Ser His Ile Leu Arg Ala Phe	
405	410	415
Val Asn Ser Gln Ile Gln Gly His	Lys Glu Met Ser Lys Val Trp Asn	
420	425	430
Asp Leu Arg Pro Lys Leu Ser Cys	Leu Phe Ala Gly Pro His Ser Thr	
435	440	445
Leu Thr Pro Pro Cys Ser Pro Pro	Glu Asp Gly Leu Cys Pro His	
450	455	460

<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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120

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240
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1620
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1680
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1740

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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala
			20				25				30			
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp
														Pro

35	40	45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met		
50	55	60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg		
65	70	75
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln		
85	90	95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val		
100	105	110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu		
115	120	125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro		
130	135	140
Val Ser His Glu His		
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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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180
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240
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420
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480
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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

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20	25	30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp		

35	40	45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser		
50	55	60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln		
65	70	75
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr		
85	90	95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro		
100	105	110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly		
115	120	125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg		
130	135	140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu		
145	150	155
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala		
165	170	175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser		
180	185	190
Leu Leu Leu Ala		
195		

<210> 5817

<211> 648

<212> DNA

<213> Homo sapiens

<400> 5817

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240
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<210> 5818

<211> 191

<212> PRT

<213> Homo sapiens

<400> 5818

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          20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
      35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
      50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
          115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
          130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
          145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
          165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
          180          185          190

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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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120
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420
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480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag caggaggat gggtgccact
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atggctgcca tcaatagcat ctacagcaac cctgacgcca acatcttgtt ctatgtagtg
600

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 720
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<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
			35				40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
		50				55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
				70						75				80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

	85		90		95										
Trp	Ile	Glu	His	Ser	Lys	Leu	Arg	Glu	Ile	Asn	Phe	Lys	Ile	Val	Glu
	100							105					110		
Phe	Asn	Pro	Met	Val	Leu	Lys	Gly	Lys	Ile	Arg	Pro	Asp	Ser	Ser	Arg
	115						120					125			
Pro	Glu	Leu	Leu	Gln	Pro	Leu	Asn	Phe	Val	Arg	Phe	Tyr	Leu	Pro	Leu
	130					135					140				
Leu	Ile	His	Gln	His	Glu	Lys	Val	Ile	Tyr	Leu	Asp	Asp	Asp	Val	Ile
145					150					155				160	
Val	Gln	Gly	Asp	Ile	Gln	Glu	Leu	Tyr	Asp	Thr	Thr	Leu	Ala	Leu	Gly
			165						170					175	
His	Ala	Ala	Ala	Phe	Ser	Asp	Asp	Cys	Asp	Leu	Pro	Ser	Ala	Gln	Asp
	180							185					190		
Ile	Asn	Arg	Leu	Val	Gly	Leu	Gln	Asn	Thr	Tyr	Met	Gly	Tyr	Leu	Asp
	195						200					205			
Tyr	Arg	Lys	Lys	Ala	Ile	Lys	Asp	Leu	Gly	Ile	Ser	Pro	Ser	Thr	Cys
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Ser	Phe	Asn	Pro	Gly	Val	Ile	Val	Ala	Asn	Met	Thr	Glu	Trp	Lys	His
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Gln	Arg	Ile	Thr	Lys	Gln	Leu	Glu	Lys	Trp	Met	Gln	Lys	Asn	Val	Glu
			245						250					255	
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<210> 5821

<211> 3292

<212> DNA

<213> Homo sapiens

<400> 5821

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<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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			20					25					30		
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35					40					45			
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
		50				55					60				
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65					70					75				80	
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85					90						95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

4986

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 565 570 575
 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe
 580 585 590
 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly
 595 600 605
 Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu
 610 615 620
 Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu
 625 630 635 640
 Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly
 645 650 655
 Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met
 660 665 670
 Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp
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<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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<210> 5824

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5824

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			20					25					30		
Ala	Ala	Leu	Glu	Lys	Gln	Glu	Lys	Gln	Leu	Glu	Leu	Glu	Ile	Lys	Lys
			35				40					45			
Met	Ala	Lys	Ile	Gly	Asn	Lys	Glu	Ala	Cys	Lys	Val	Leu	Ala	Lys	Gln
	50					55					60				
Leu	Val	His	Leu	Arg	Lys	Gln	Lys	Thr	Arg	Thr	Phe	Ala	Val	Ser	Ser
65					70				75					80	
Lys	Val	Thr	Ser	Met	Ser	Thr	Gln	Thr	Lys	Val	Met	Asn	Ser	Gln	Met
				85					90					95	
Lys	Met	Ala	Gly	Ala	Met	Ser	Thr	Thr	Ala	Lys	Thr	Met	Gln	Ala	Val
			100					105					110		
Asn	Lys	Lys	Met	Asp	Pro	Gln	Lys	Thr	Leu	Gln	Thr	Met	Gln	Asn	Phe
	115						120						125		
Gln	Lys	Glu	Asn	Met	Lys	Met	Glu	Met	Thr	Glu	Glu	Met	Ile	Asn	Asp
	130					135					140				
Thr	Leu	Asp	Asp	Ile	Phe	Asp	Gly	Ser	Asp	Asp	Glu	Glu	Glu	Ser	Gln
145					150				155					160	
Asp	Ile	Val	Asn	Gln	Val	Leu	Asp	Glu	Ile	Gly	Ile	Glu	Ile	Ser	Gly
			165					170						175	
Lys	Met	Ala	Lys	Ala	Pro	Ser	Ala	Ala	Arg	Ser	Leu	Pro	Ser	Ala	Ser
			180					185					190		
Thr	Ser	Lys	Ala	Thr	Ile	Ser	Asp	Glu	Glu	Ile	Glu	Arg	Gln	Leu	Lys
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<210> 5825

<211> 1940

<212> DNA

<213> Homo sapiens

<400> 5825

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<210> 5826

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5826

Val	His	Thr	Asp	Arg	Phe	Phe	Leu	Val	Thr	Leu	Arg	Arg	Glu	Phe	Gln
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Gly	Val	Ser	Pro	Ser	Glu	Ala	Ser	Leu	His	Cys	Val	Lys	Glu	Ala	Pro
			20					25				30			
Ser	Cys	Ser	Arg	Gly	Leu	Leu	Pro	Pro	Leu	Pro	Ile	Pro	Ser	Pro	Val
		35					40				45				
Lys	Cys	Leu	Cys	Phe	Ala	Tyr	Cys	Val	Trp	Met	Cys	Val	Cys	Val	Cys
	50					55				60					
Val	Cys	Val	Cys	Val	Cys	Val	Cys	Phe	Cys	Val	Cys	Leu	Met	Leu	Cys
65				70					75					80	
Leu	Leu	Val	Thr	Glu	Ala	Ser	Lys								
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<210> 5827

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5827

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<210> 5828

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 5828
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 35 40 45
 Trp Glu Arg Pro Leu Phe Ile Lys Leu Gly Phe Phe Leu Ile Ser Leu
 50 55 60
 Pro Asn Val Val Ser Gln Tyr Ser Ser Tyr Ser Ser Leu Gln Gly Val
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<210> 5829
 <211> 5747
 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5830

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      35              40              45
His Gly Leu Gln Gly Cys Leu Glu Ala Gln Gly Gly Gln Val Arg Val
      50              55              60
Thr Pro Ala Cys Asn Thr Ser Leu Pro Ala Gln Arg Trp Lys Trp Val
      65              70              75              80
Ser Arg Asn Arg Leu Phe Asn Leu Gly Thr Met Gln Cys Leu Gly Thr
      85              90              95
Gly Trp Pro Gly Thr Asn Thr Thr Ala Ser Leu Gly Met Tyr Glu Cys
      100             105             110
Asp Arg Glu Ala Leu Asn Leu Arg Trp His Cys Arg Thr Leu Gly Asp
      115             120             125
Gln Leu Ser Leu Leu Leu Gly Ala Arg Thr Ser Asn Ile Ser Lys Pro
      130             135             140
Gly Thr Leu Glu Arg Gly Asp Gln Thr Arg Ser Gly Gln Trp Arg Ile
      145             150             155             160
Tyr Gly Ser Glu Glu Asp Leu Cys Ala Leu Pro Tyr His Glu Val Tyr
      165             170             175
Thr Ile Gln Gly Asn Ser His Gly Lys Pro Cys Thr Ile Pro Phe Lys
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Tyr Asp Asn Gln Trp Phe His Gly Cys Thr Ser Thr Gly Arg Glu Asp
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Gly His Leu Trp Cys Ala Thr Thr Gln Asp Tyr Gly Lys Asp Glu Arg
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Trp Gly Phe Cys Pro Ile Lys Ser Asn Asp Cys Glu Thr Phe Trp Asp
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Lys Asp Gln Leu Thr Asp Ser Cys Tyr Gln Phe Asn Phe Gln Ser Thr
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Ser Gln Ala Glu Leu Asp Phe Leu Ser His Asn Leu Gln Lys Phe Ser
865          870          875          880
Arg Ala Gln Glu Gln His Trp Trp Ile Gly Leu His Thr Ser Glu Ser
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